statistics estonia

PC-AXIS 2006

User Manual

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Introduction

When installing PC-AXIS 2006 a new folder *Pcaxis2006* and some files into the system folder are created on the hard disk. File *Pcaxis.exe* in the folder *Pcaxis2006* must be started to use PC-AXIS.
To create your own database it is recommended to create a folder for database and subfolders for subject areas in the database. The tables in database are organised and displayed like any other files in Windows.

PC-AXIS allows presenting statistical tables and graphs. Usually statistical indicator is expressed using specified characteristics called classification variables. In the title of the table, the list of classification variables is automatically generated after “by”. One or more indicators can be presented in the table.

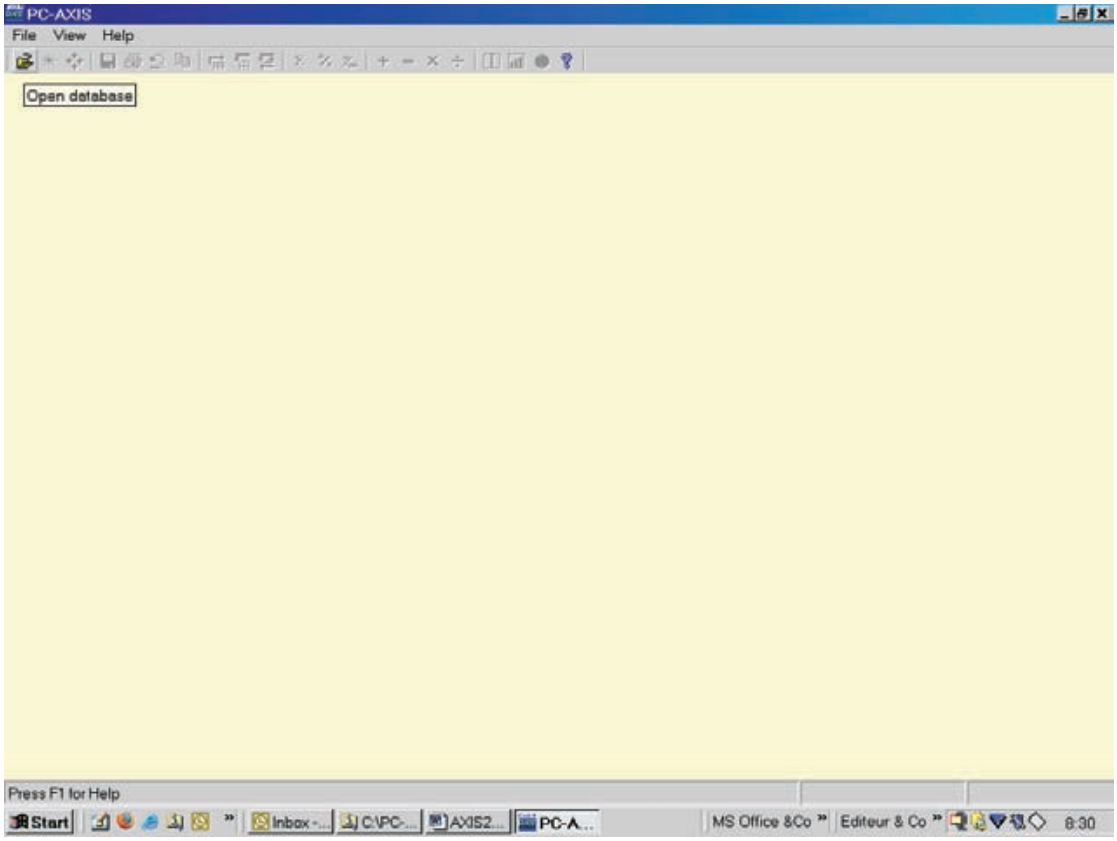
This instruction has been compiled according to those published in Denmark and Sweden.

The most important news in PC-AXIS 2006:

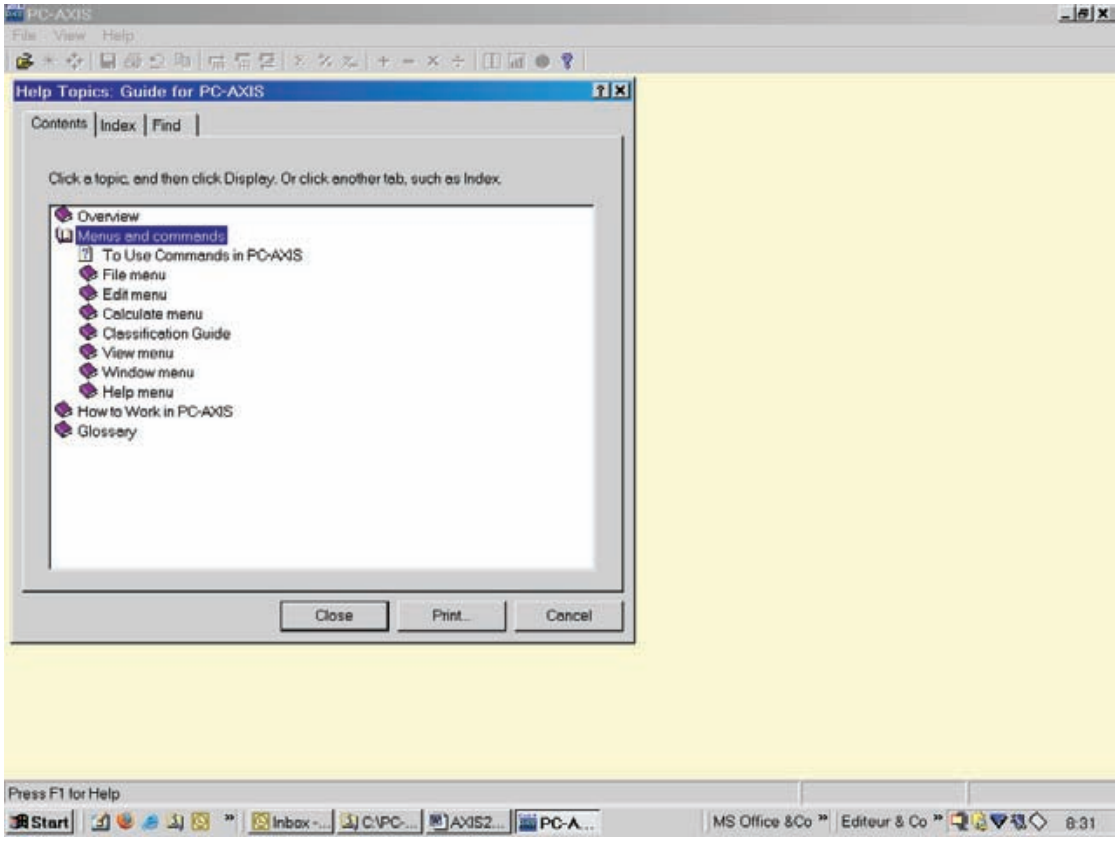
- The table cells can get a thousand delimiter
- Optional menu for long texts in variable values
- A link between PC-AXIS and Excel is automatically established when istalling PC-AXIS
- New function to produce HTML list of contents for PC-AXIS database
- The possibility to save queries towards px-files and run them in batch. Start by selecting ***File Start recording***. Give the bat file a suitable name. Then do the selection, editing, calculation and conversion you need and select ***File Stop recording***. Go through all the pxq-files you see in the list and give them suitable names. The saved queries can be run from PC-AXIS by ***Run saved query***....

Instruction for creating maps has been added.

HELP FUNCTIONS

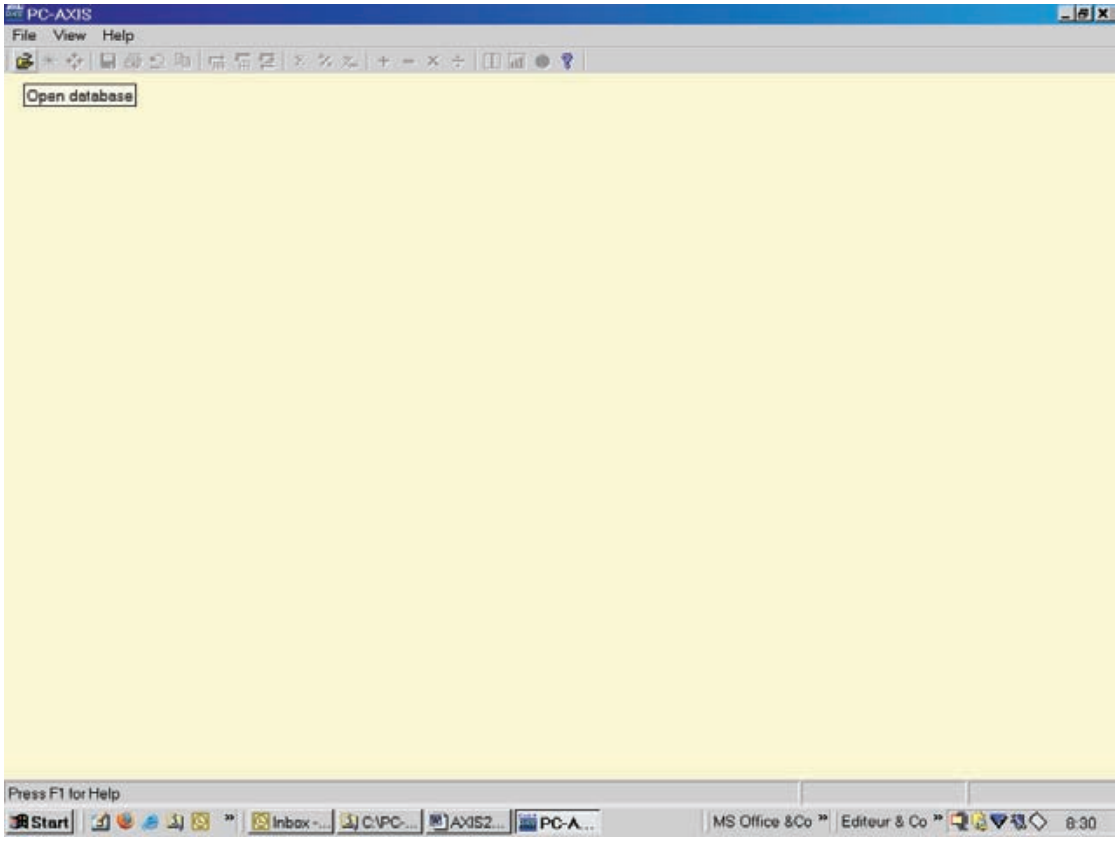


When the mouse indicator touches a tool button explanatory information is shown.
If you need more help, please use the toolkey that opens the help function.



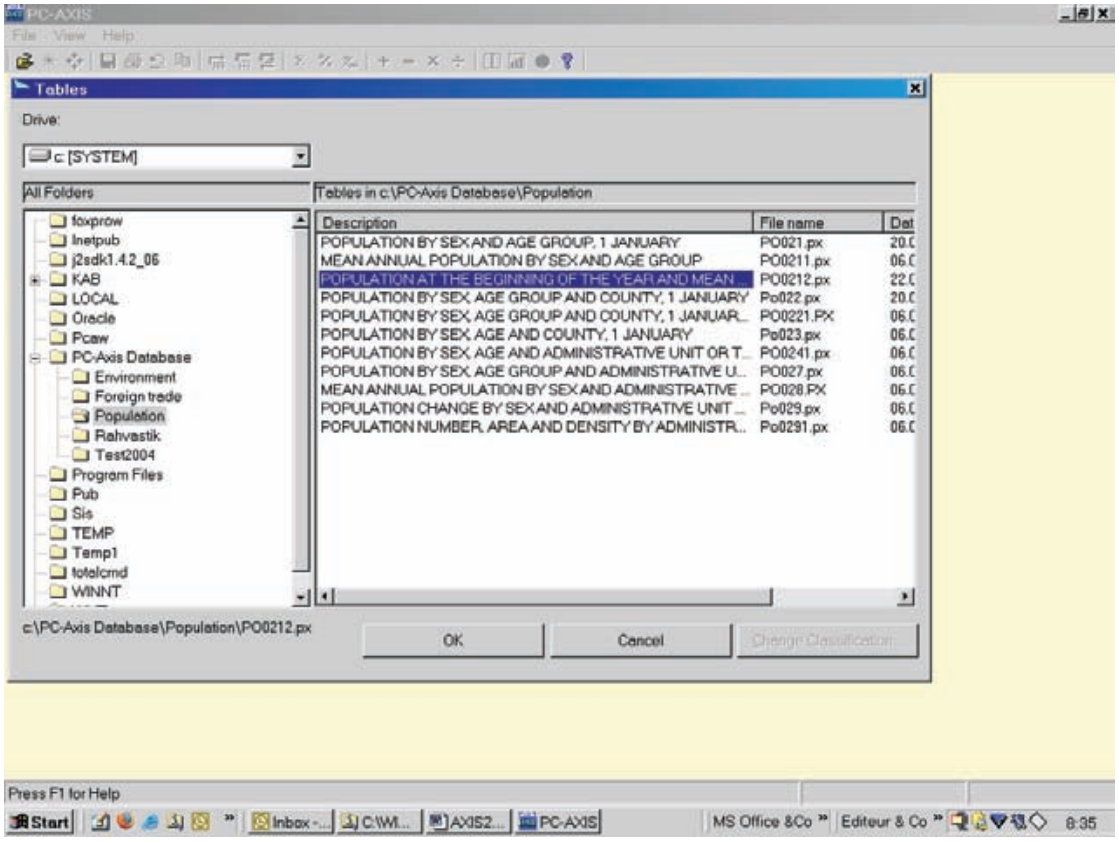
You can also press F1 to get context related help wherever you are in PC-AXIS.

OPEN A DATABASE



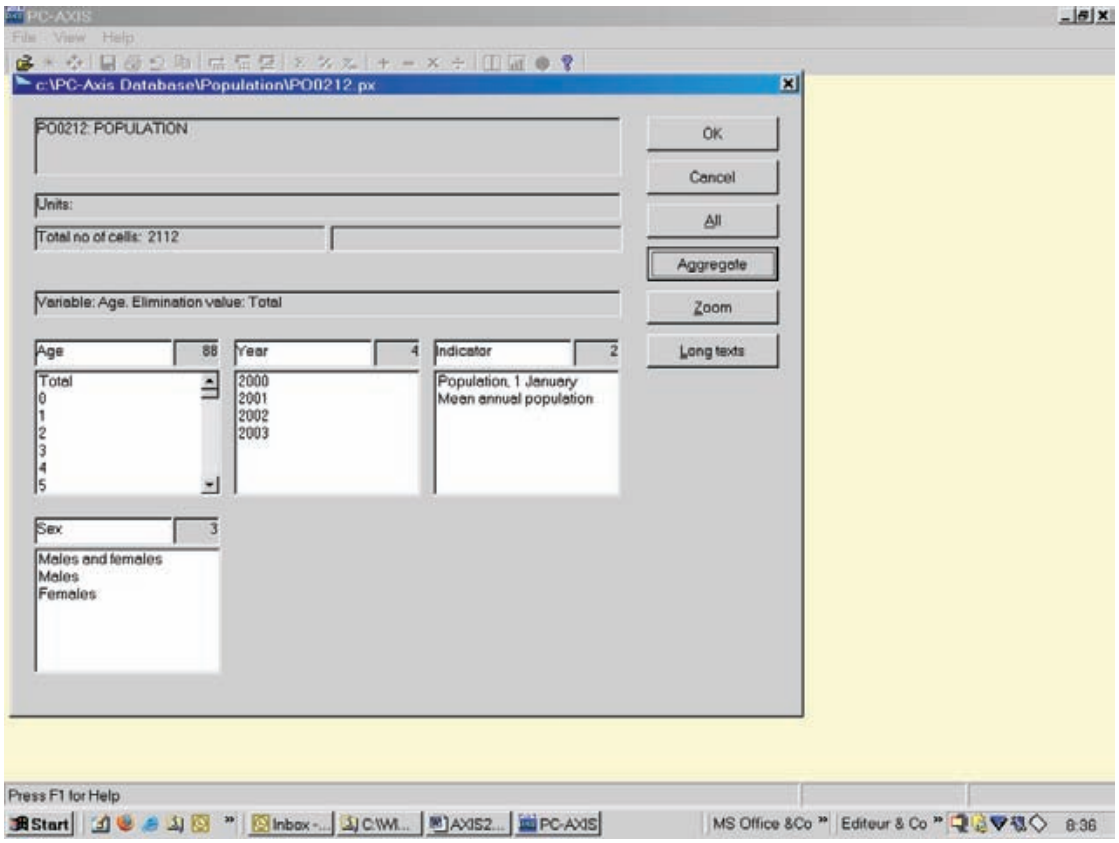
When you are opening a table in PC-AXIS, there are optional ways of doing it. If the program is running, just press ***File*** - ***Open Database*** and you will find the folder, which contains the current database or table.
The PC-AXIS files have the extension px.

Select a table



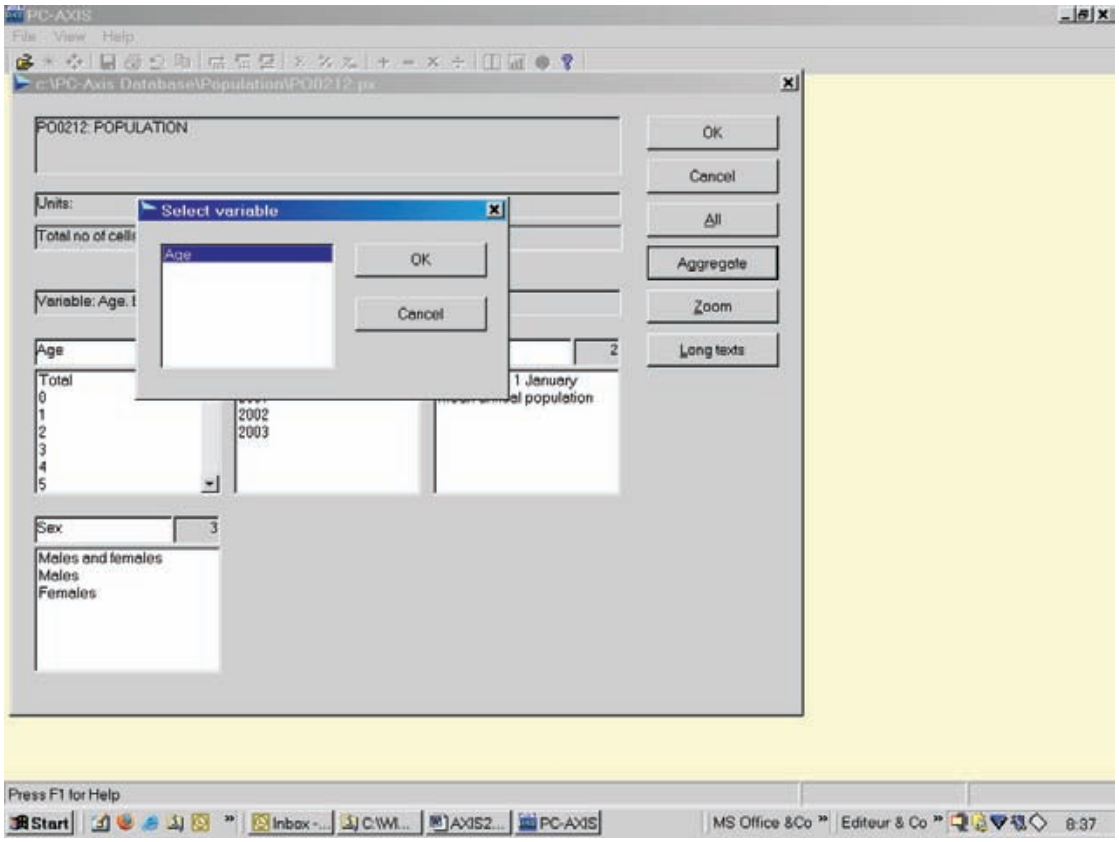
Use the function ***Change Classification...*** (see below) where you can change the aggregation directory.
When you are going to select a new table you either can click on it, or mark it and then press the ***Enter*** key.

OPEN A TABLE



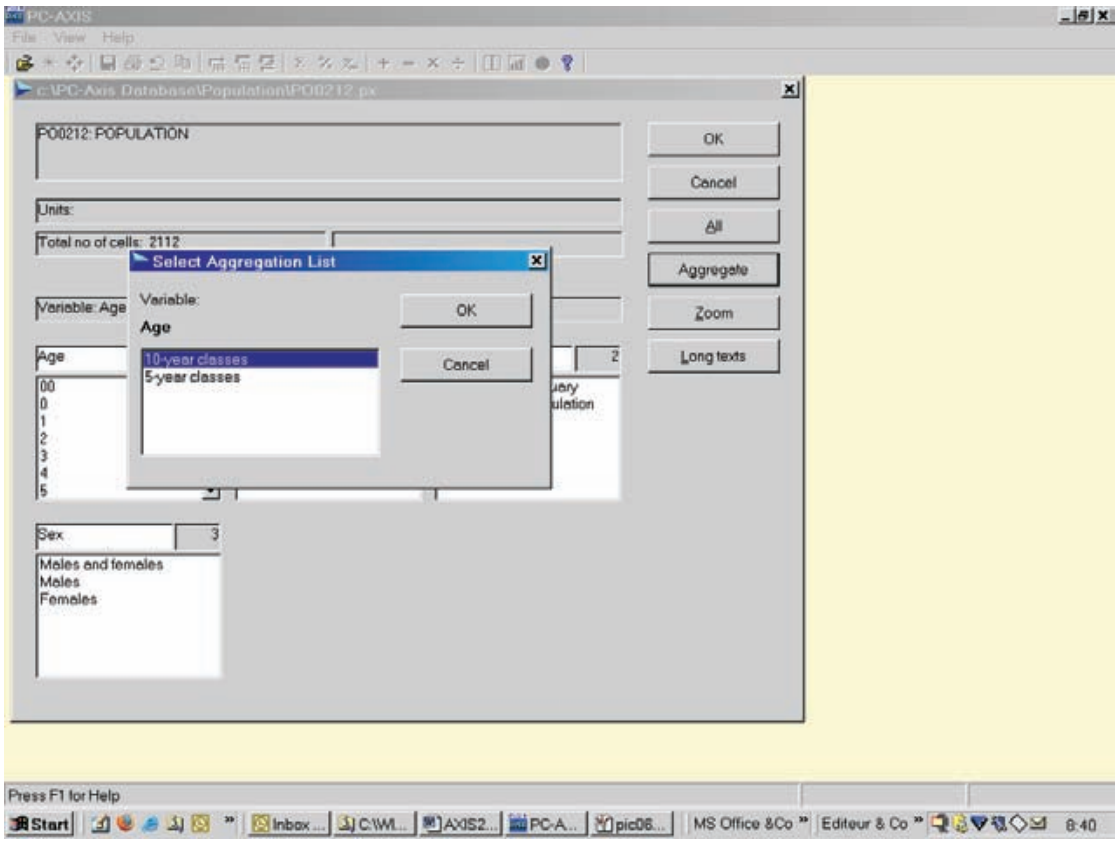
If you need all values of the variable just click on the name of the variable on the top of a list.
If certain values are to be selected you have to press CTRL + left mouse button (alternative CTRL + right mouse button). Only the selected values will appear in the table.
If you wish to get all the variables and all the values of the variables, just click on the button ***All***.

Aggregate values



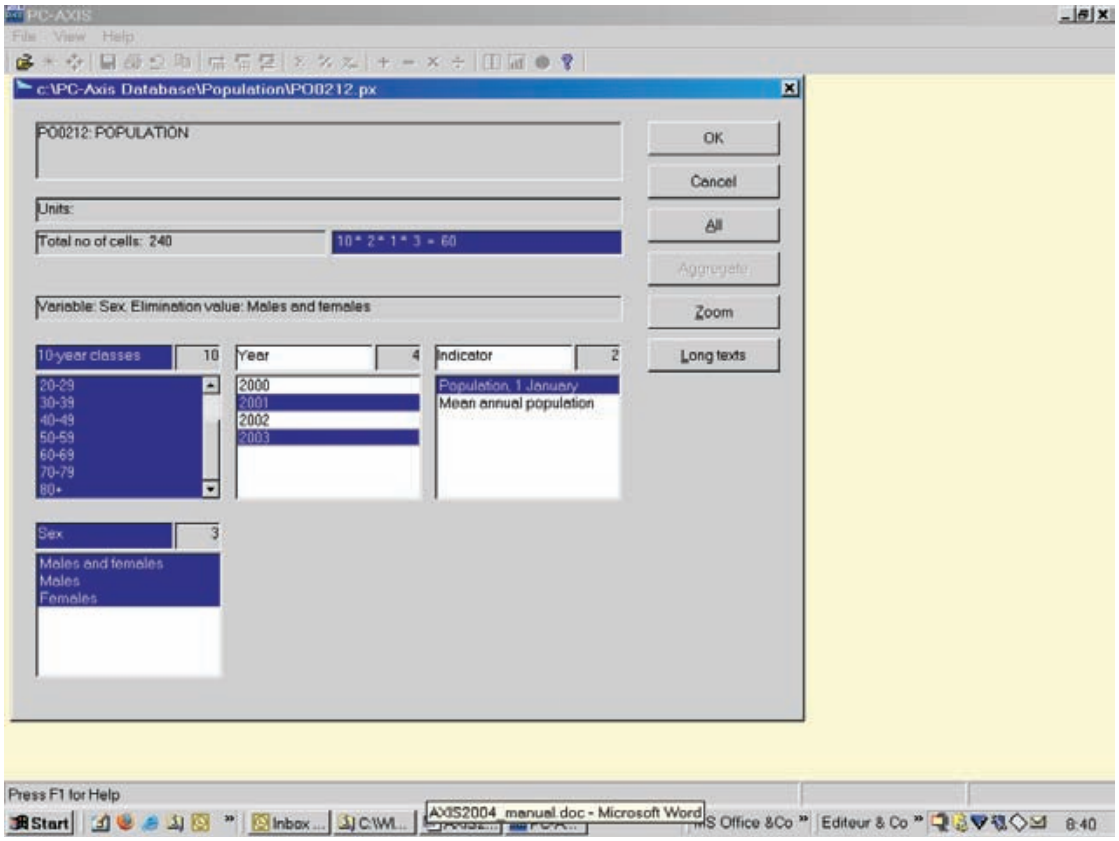
You can use the classifications if you have a table which is more detailed than you want it to be. Classify the variable *age* by using the button ***Aggregate.***
If the button ***Aggregate*** is not active, the directory for aggregation list is not correctly allocated.
Use the function ***Change Classification*** when selecting a table.

Select aggregation list

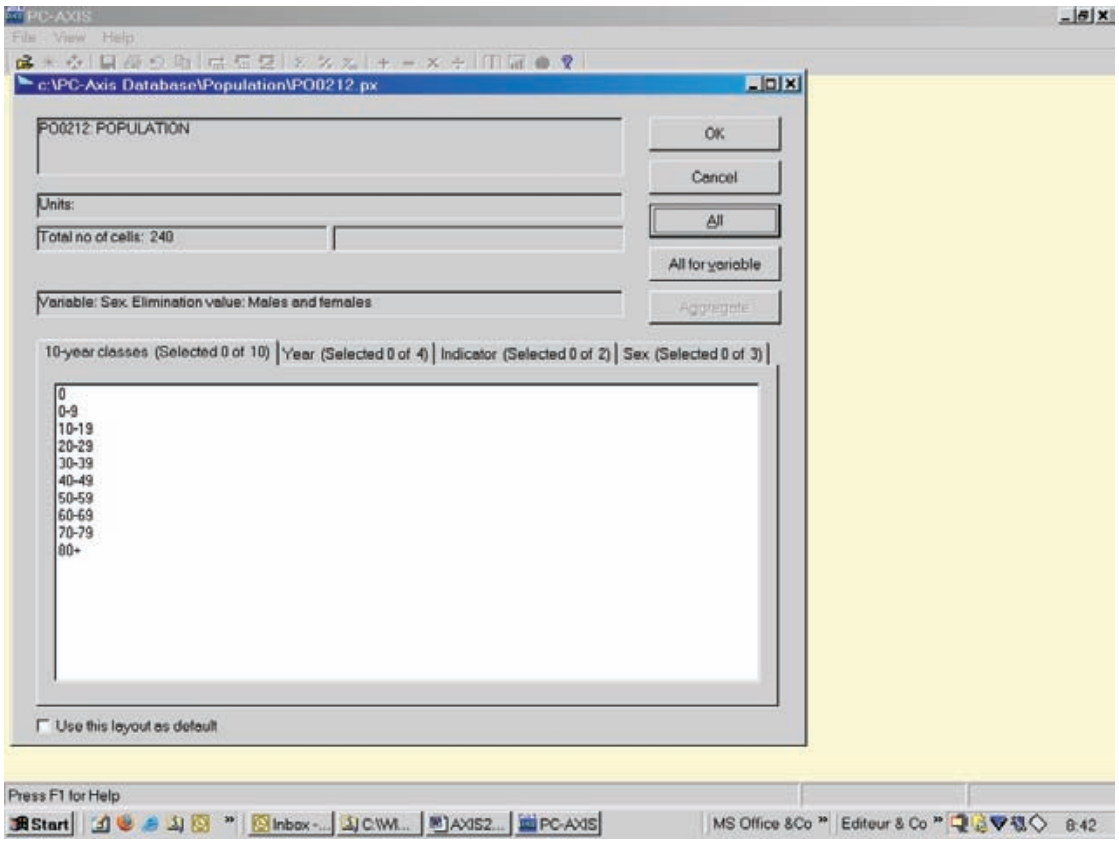


The option to aggregate values differ from table to table. The table presented by municipalities can be aggregated on region. If you wish to classify on variable age (in the selected table it is in one year classes), you can aggregate it on five year classes or ten year classes.

Select values to the table

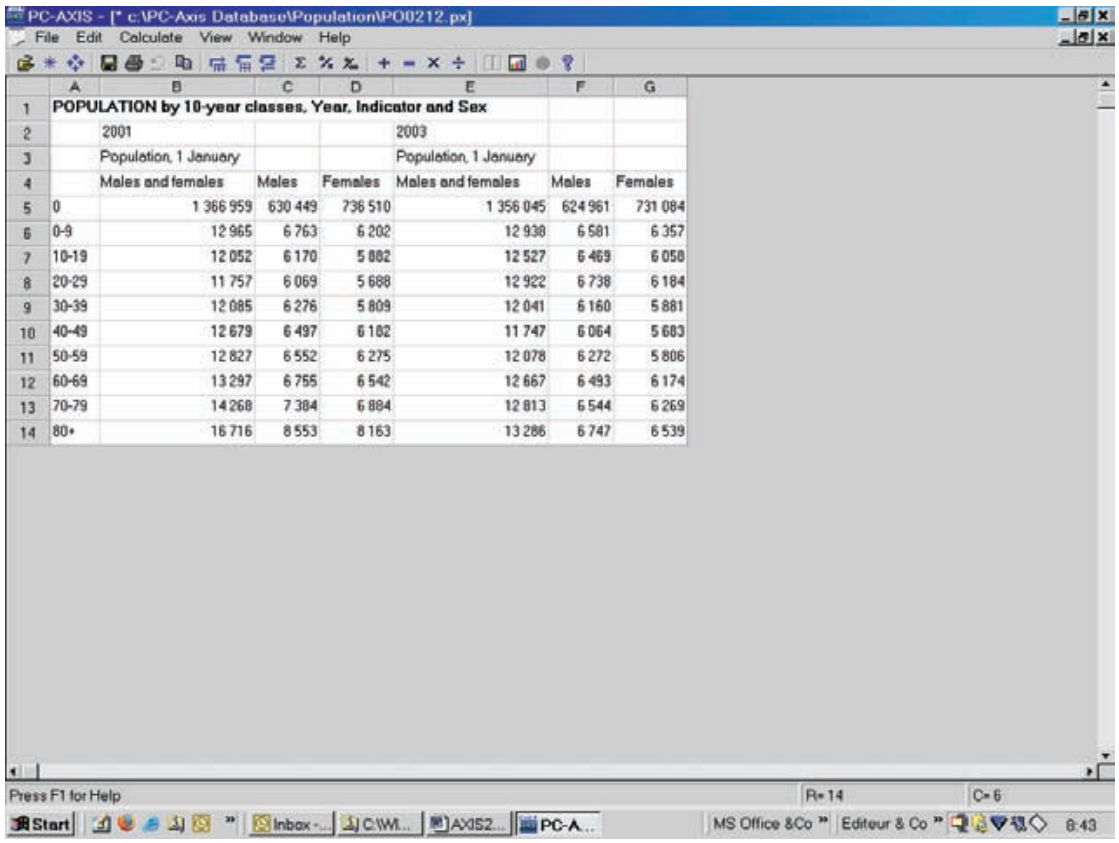


When all selections are finished, click ***OK*** and the table appears on the screen.
If there are very long texts on the variable values there is an option to get an alternative menu. Just press ***Long texts***.



If you tick the option ***Use this layout as default***, the only way to alter back to the original layout can be done in the menu ***View - Advanced,*** the tag ***Information*** where you can tick the box ***Show value selection in layout with small listboxes***.

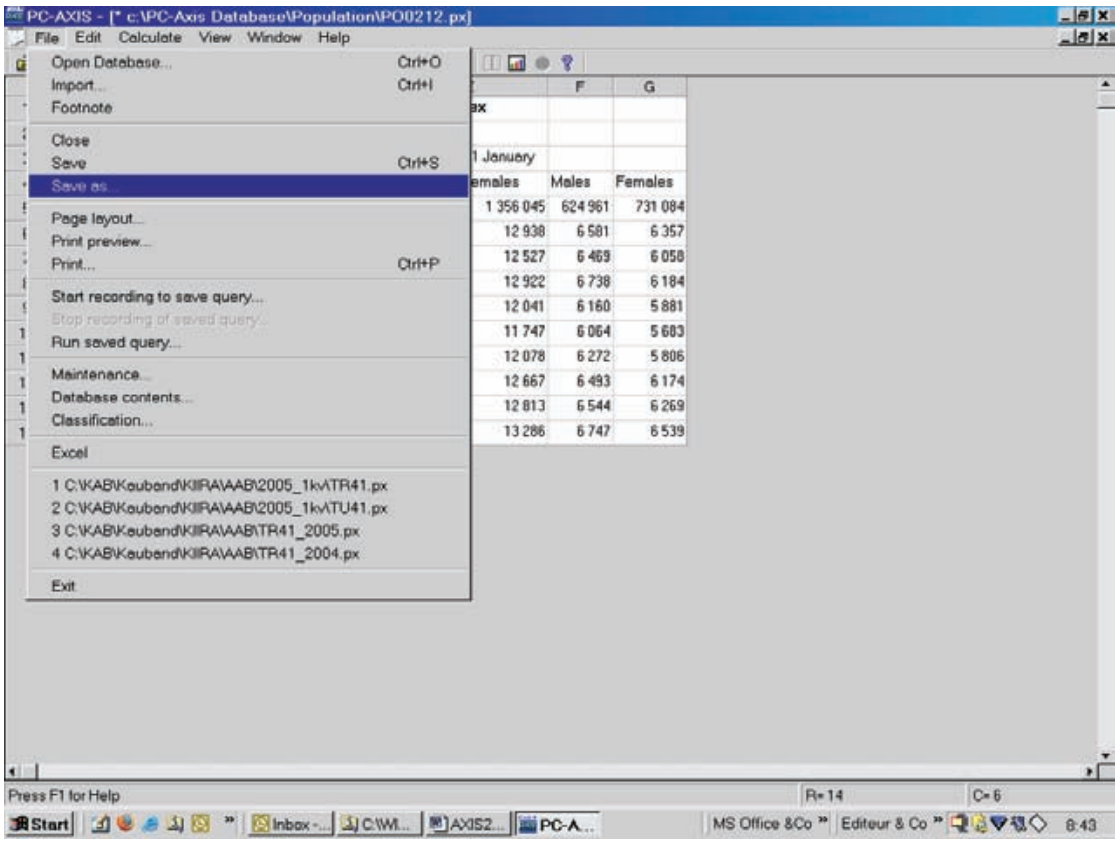
A table in PC-AXIS



	A	B	C	D	E	F	G
1	**POPULATION by 10-year classes, Year, Indicator and Sex**						
2		2001			2003		
3		Population, 1 January			Population, 1 January		
4		Males and females	Males	Females	Males and females	Males	Females
5	0	1 366 959	630 449	736 510	1 356 045	624 961	731 084
6	0-9	12 965	6 763	6 202	12 938	6 581	6 357
7	10-19	12 052	6 170	5 882	12 527	6 469	6 058
8	20-29	11 757	6 069	5 688	12 922	6 738	6 184
9	30-39	12 085	6 276	5 809	12 041	6 160	5 881
10	40-49	12 679	6 497	6 182	11 747	6 064	5 683
11	50-59	12 827	6 552	6 275	12 078	6 272	5 806
12	60-69	13 297	6 755	6 542	12 667	6 493	6 174
13	70-79	14 268	7 384	6 884	12 813	6 544	6 269
14	80+	16 716	8 553	8 163	13 286	6 747	6 539

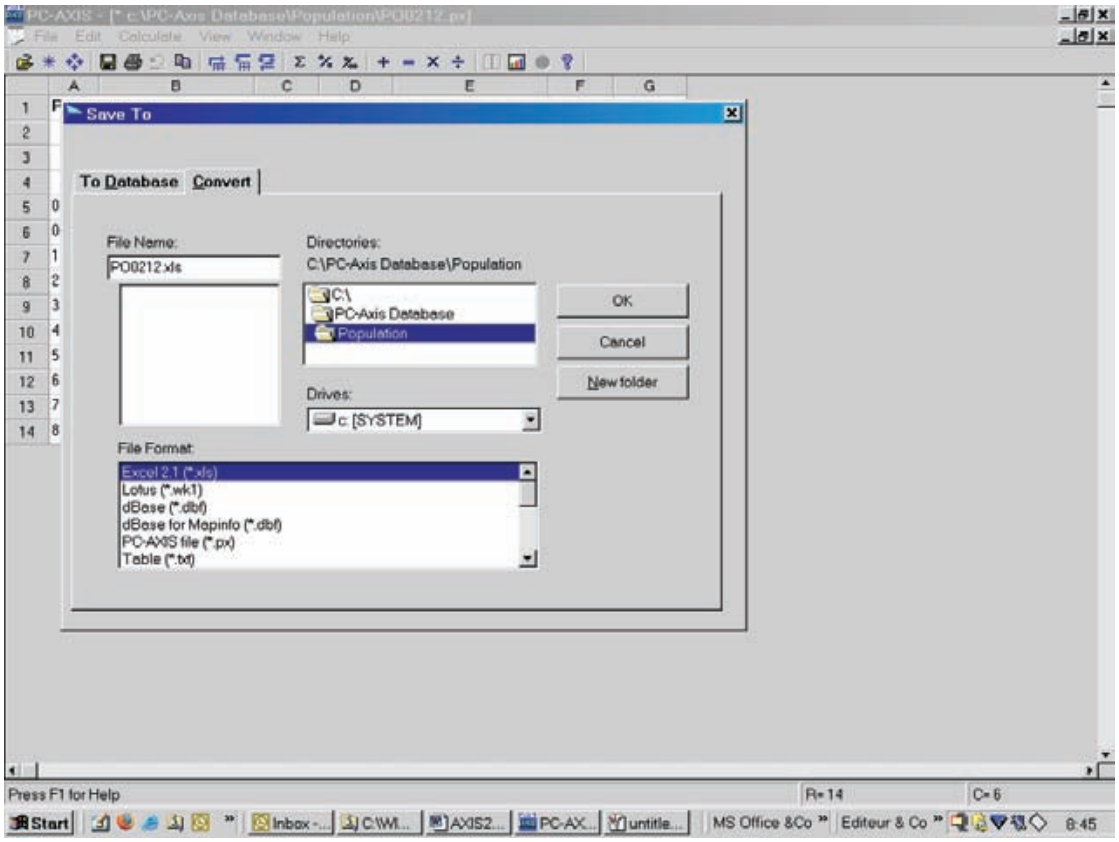
Click on the asterisk in the top panel to get the footnotes for the table. Available information is Source, Units, Internal reference code and some other necessary notes. There might even be certain information on the material, a variable or a value of a variable.

SAVE A TABLE



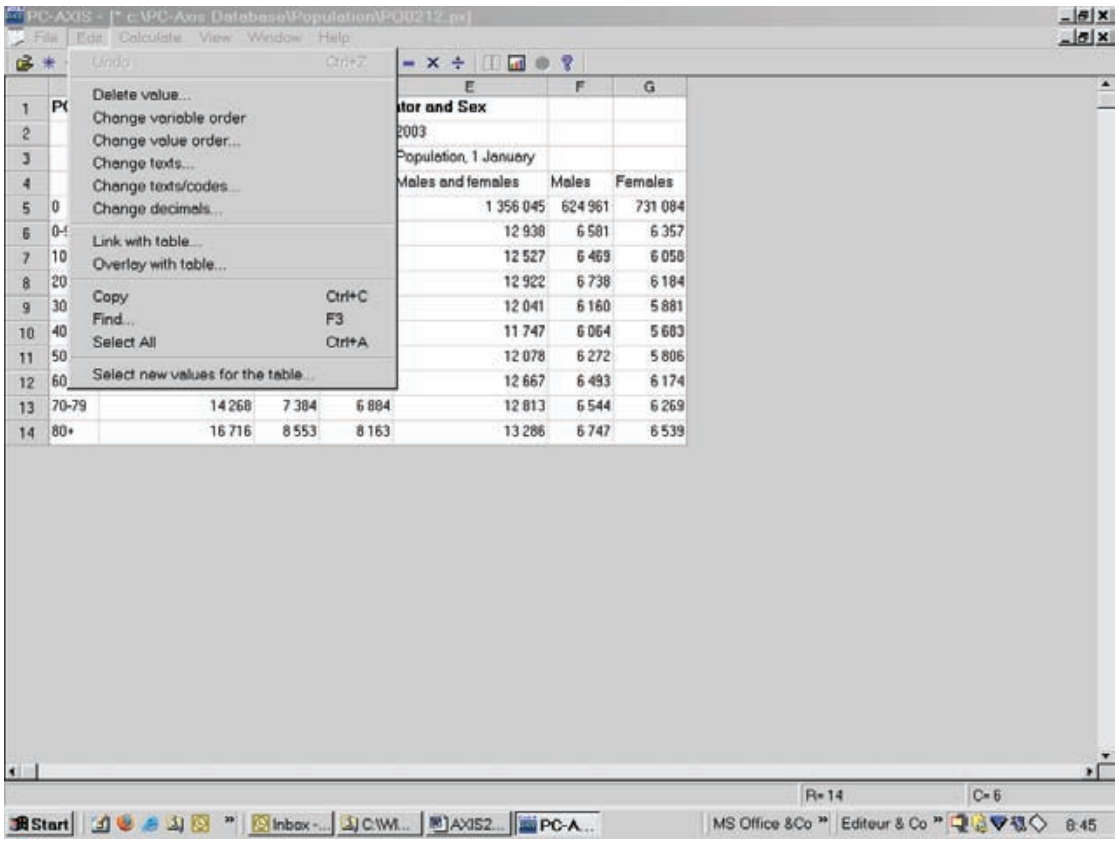
You can save the table using ***File - Save as…***. Then a windows turns up where you can enter where to save the file and name the file.

Using Convert and Save in another file format



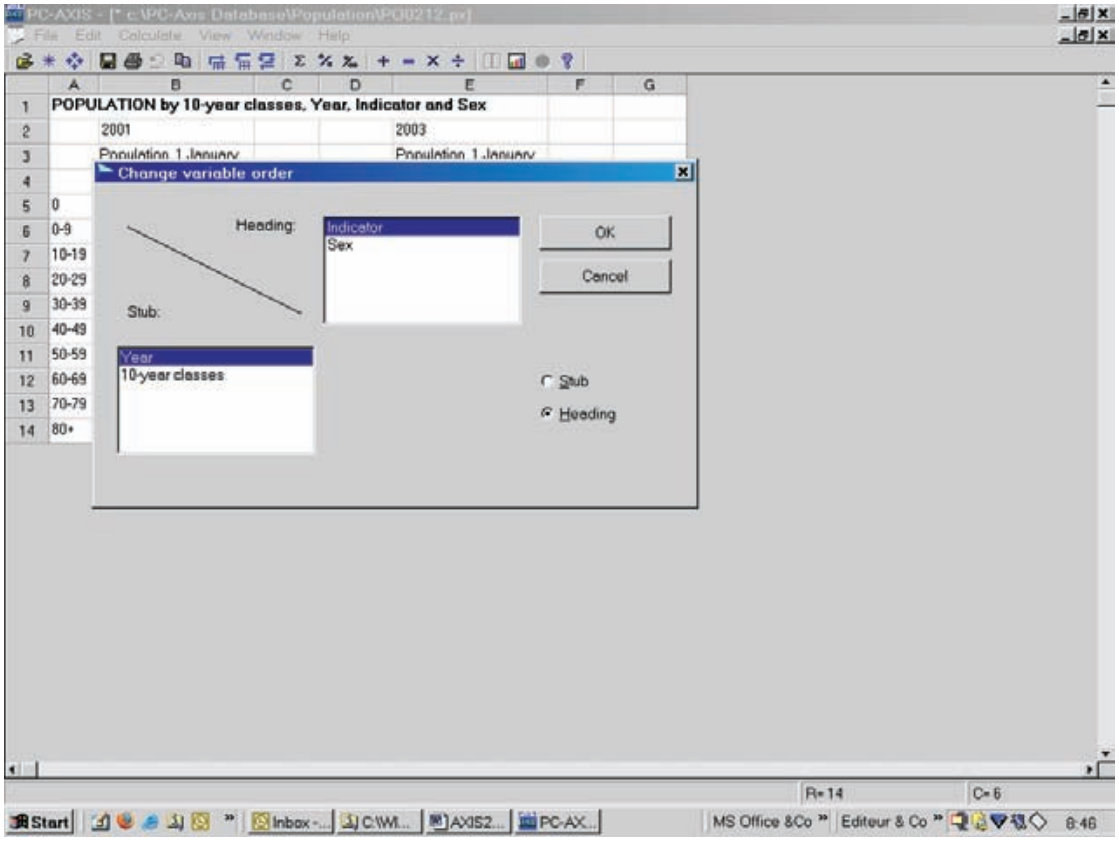
If you would like to save the table in another file format you just select the tag ***Convert***.
You can save the table in any of the optional file formats.

EDIT A TABLE


Undo Ctrl+Z
Delete value...
Change variable order
Change value order...
Change texts...
Change texts/codes...
Change decimals...
Link with table...
Overlay with table...
Copy Ctrl+C
Find... F3
Select All Ctrl+A
Select new values for the table...
Males and females
Males
Females
Population, 1 January
2003
1 356 045 624 961 731 084
12 938 6 581 6 357
12 527 6 469 6 058
12 922 6 738 6 184
12 041 6 160 5 881
11 747 6 064 5 683
12 078 6 272 5 806
12 667 6 493 6 174
70-79 14 268 7 384 6 884 12 813 6 544 6 269
80+ 16 716 8 553 8 163 13 286 6 747 6 539
R= 14
C= 6

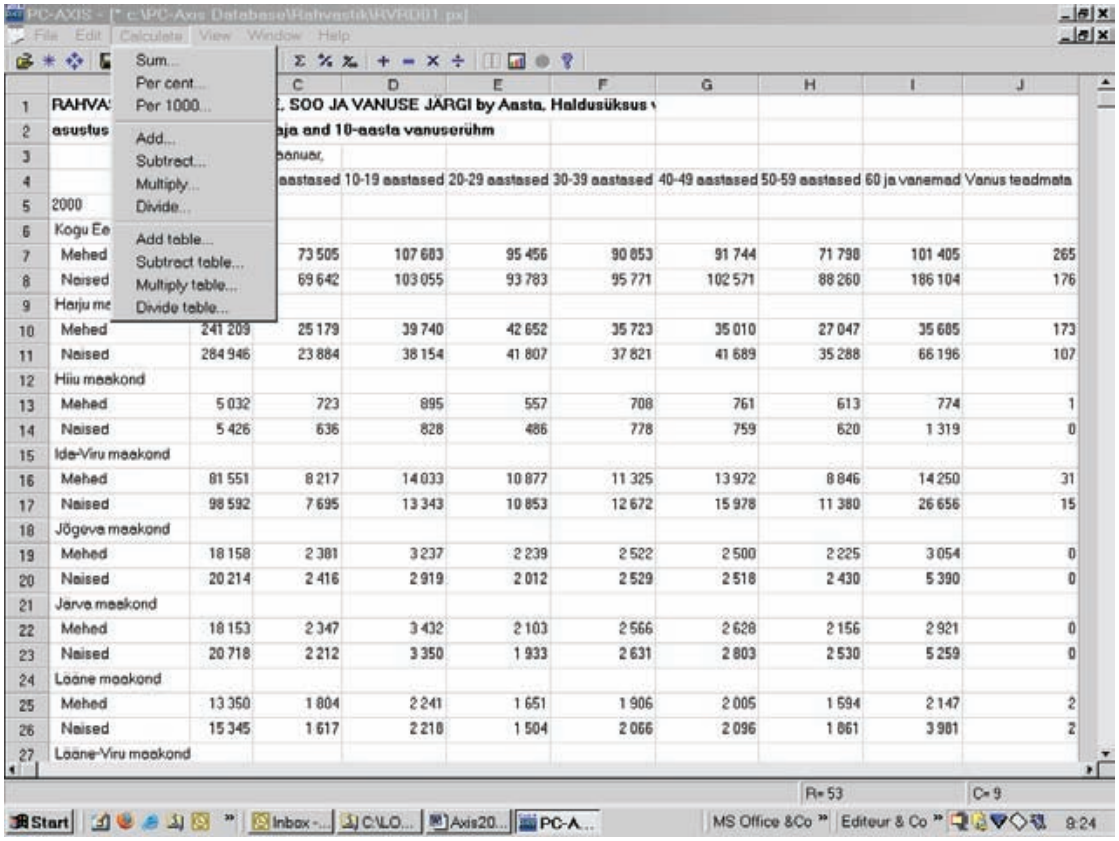
It is possible to change the texts in the column headings and the stub. Use ***Edit - Change texts…***. It is possible to change the variable name and variable values. Mark the value you want to change. Enter the new text and press Enter.

Drag and drop variables using the mouse



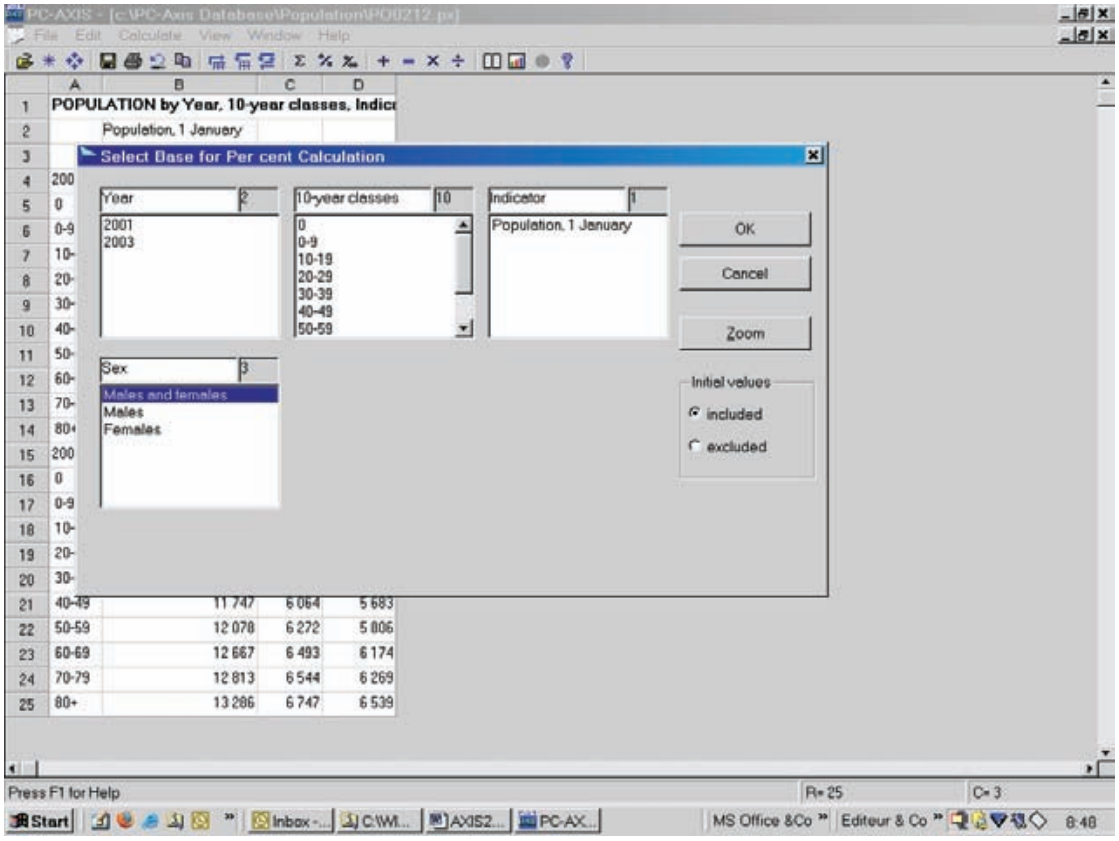
Drag the variable names from Stub to Heading or vice versa.

SIMPLE CALCULATIONS

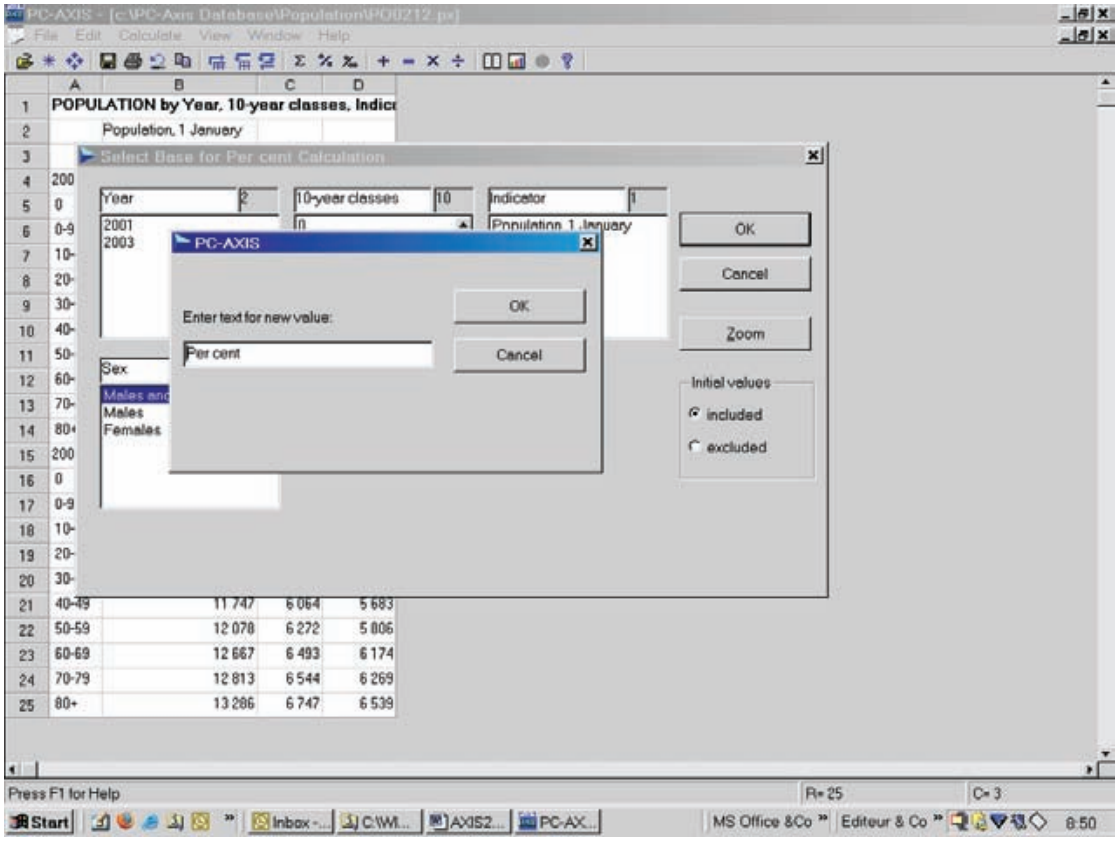


The pull down menu ***Calculate*** exposes the calculation options.

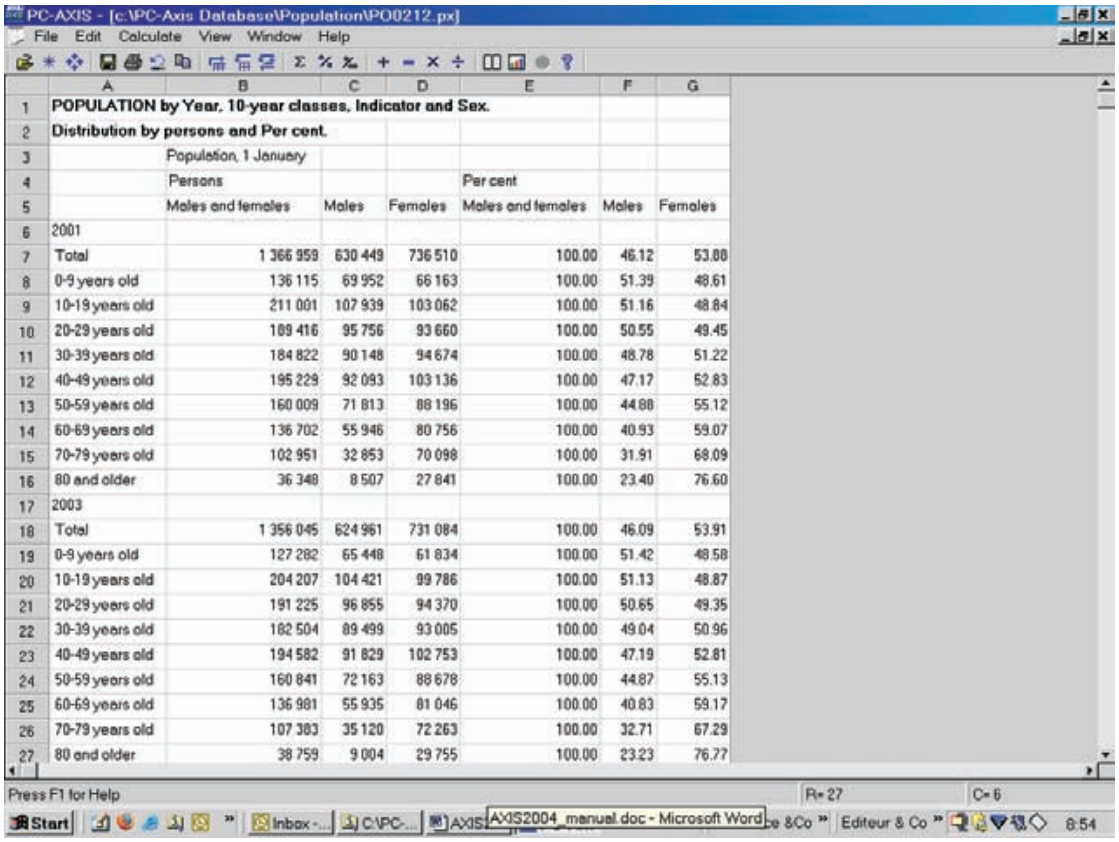
Calculate Per cent



Calculate the ratio of males and females. Select ***Calculate - Per cent…*** and use the “Males and females” of sex as the base for the calculation.



Enter a name on the new value or use the default name ”Per cent”.
If you just want the resulting per cent to remain in the table use ***excluded*** in the area ***Initial values***.



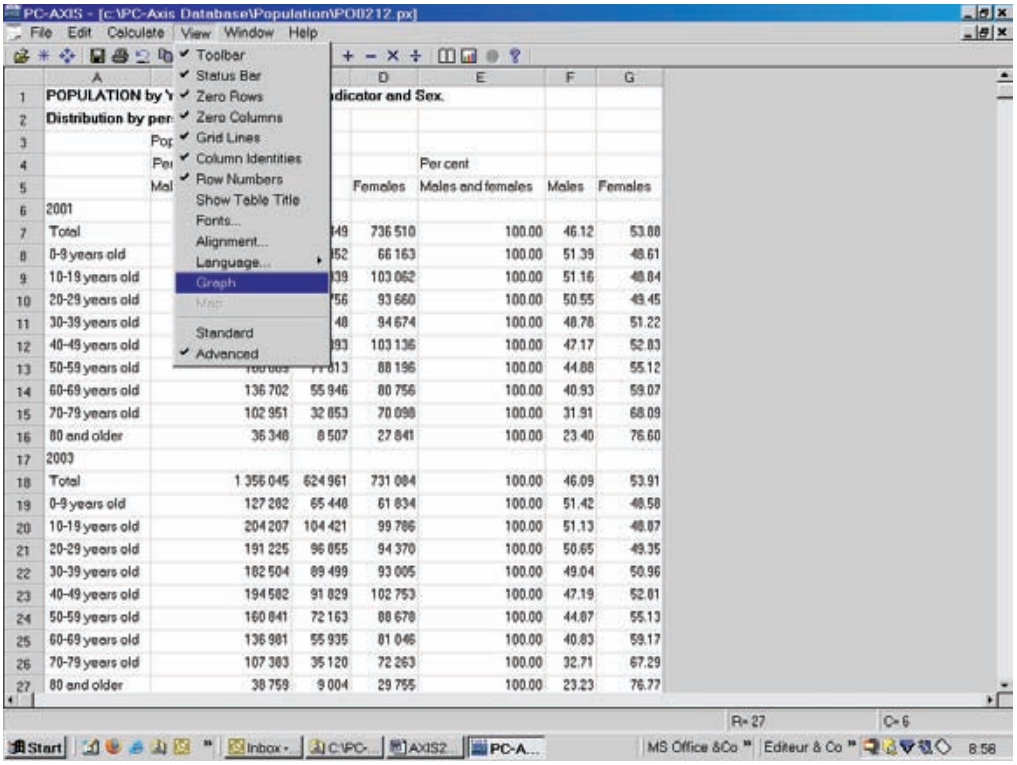
	A	B	C	D	E	F	G
1	**POPULATION by Year, 10-year classes, Indicator and Sex.**						
2	**Distribution by persons and Per cent.**						
3		Population, 1 January					
4		Persons			Per cent		
5		Males and females	Males	Females	Males and females	Males	Females
6	2001						
7	Total	1 366 959	630 449	736 510	100.00	46.12	53.88
8	0-9 years old	136 115	69 952	66 163	100.00	51.39	48.61
9	10-19 years old	211 001	107 939	103 062	100.00	51.16	48.84
10	20-29 years old	189 416	95 756	93 660	100.00	50.55	49.45
11	30-39 years old	184 822	90 148	94 674	100.00	48.78	51.22
12	40-49 years old	195 229	92 093	103 136	100.00	47.17	52.83
13	50-59 years old	160 009	71 813	88 196	100.00	44.88	55.12
14	60-69 years old	136 702	55 946	80 756	100.00	40.93	59.07
15	70-79 years old	102 951	32 853	70 098	100.00	31.91	68.09
16	80 and older	36 348	8 507	27 841	100.00	23.40	76.60
17	2003						
18	Total	1 356 045	624 961	731 084	100.00	46.09	53.91
19	0-9 years old	127 282	65 448	61 834	100.00	51.42	48.58
20	10-19 years old	204 207	104 421	99 786	100.00	51.13	48.87
21	20-29 years old	191 225	96 855	94 370	100.00	50.65	49.35
22	30-39 years old	182 504	89 499	93 005	100.00	49.04	50.96
23	40-49 years old	194 582	91 829	102 753	100.00	47.19	52.81
24	50-59 years old	160 841	72 163	88 678	100.00	44.87	55.13
25	60-69 years old	136 981	55 935	81 046	100.00	40.83	59.17
26	70-79 years old	107 383	35 120	72 263	100.00	32.71	67.29
27	80 and older	38 759	9 004	29 755	100.00	23.23	76.77

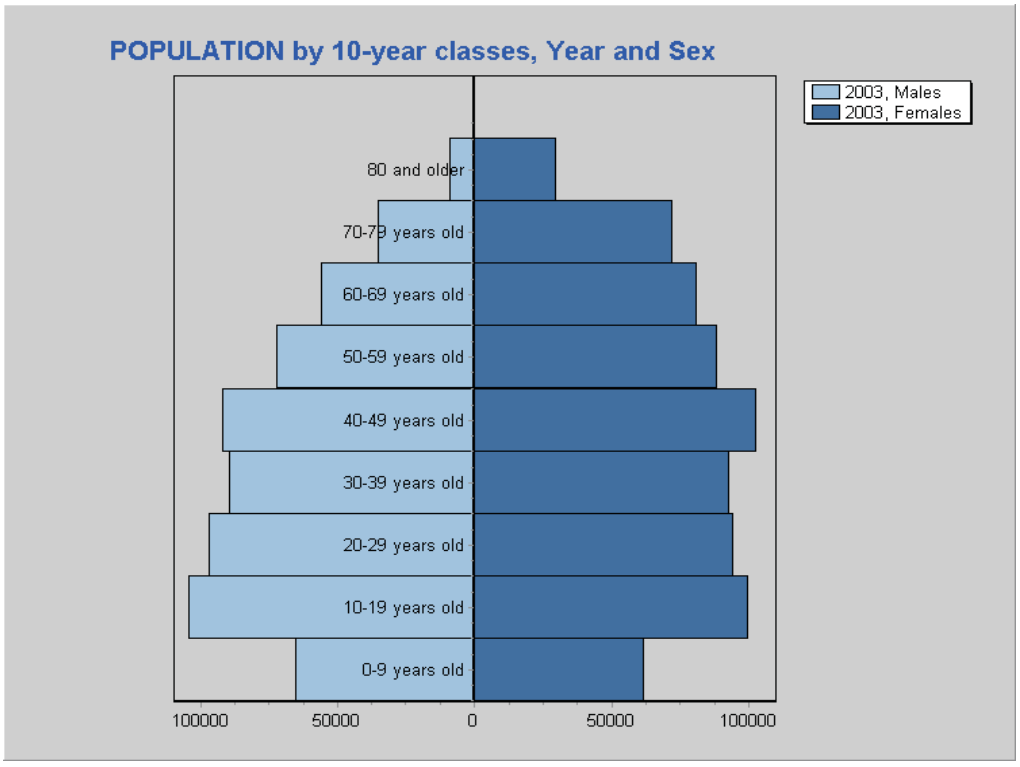
Now the percentages are inserted into the table.

DIAGRAMS

The table in PC-AXIS can be presented in a diagram according to a number of diagram types. It is possible to make different types of graphs, like charts, line diagrams and population pyramids.

To make a graph you have to use menu ***View Graph*** or click on the icon and select your choice of a diagram.

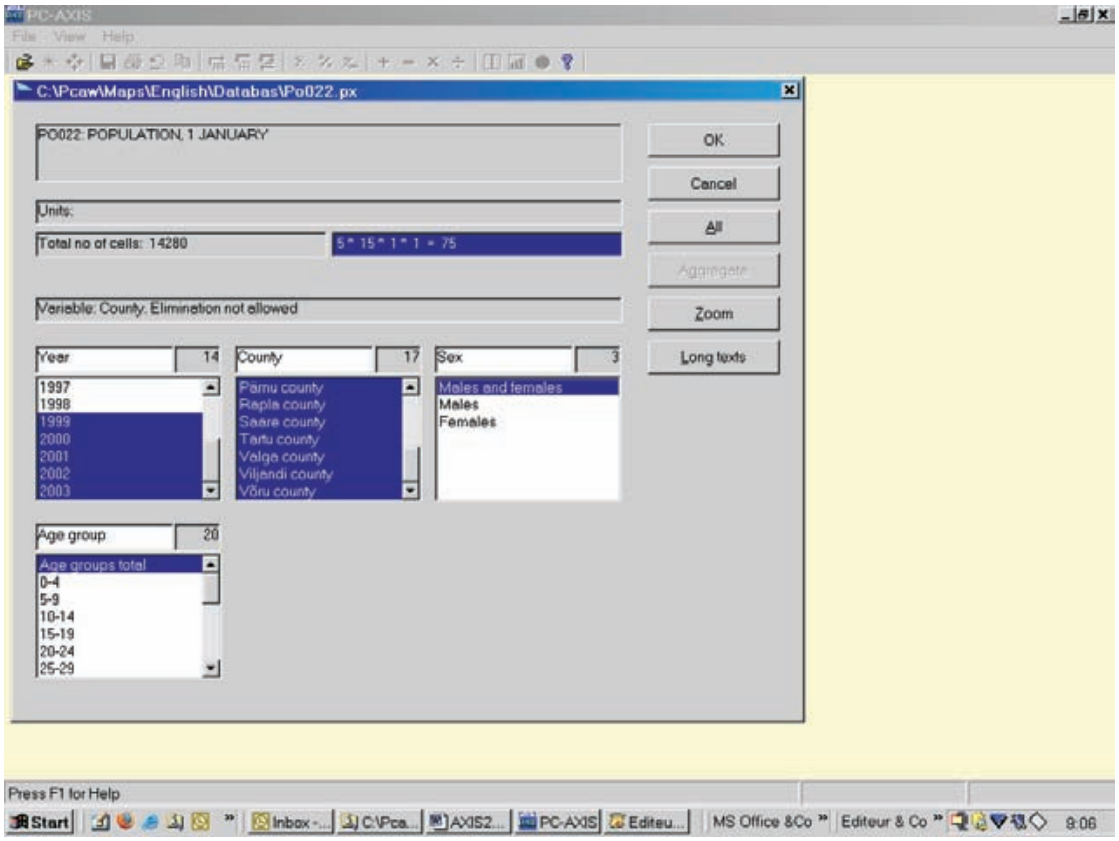




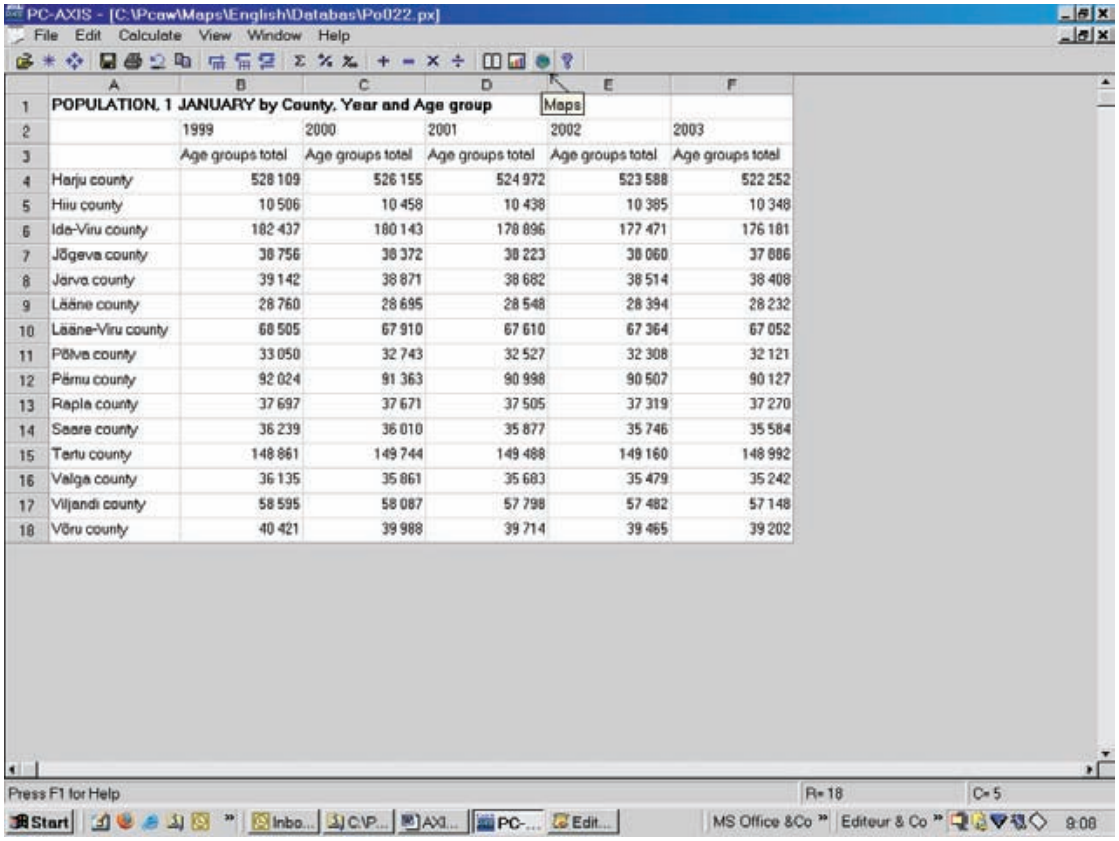
If you press the button ***Adjust...*** you will get some options to change in the graph.
You can use the button ***Copy*** in the graph window and insert the graph into another Windows program like MS-Word and MS-Excel.
When arriving to the other program where the graph is supposed to be inserted use the ***paste special*** option using ***bitmap*** format. If not using this, a table will appear instead of the graph in the windows program.
Certain diagrams are based upon certain number of columns or variables to be presented. The population pyramid is based on a table consisting of two columns.

MAPS

PX-MAP is a map-module in the PC-AXIS software family and this module can be launched from PC-AXIS. PX-Map is a tool for presenting statistical data.
When selecting data in PC-AXIS for PX-MAP usage, remember not to pick out more than one varying variable in addition to your regional variable.

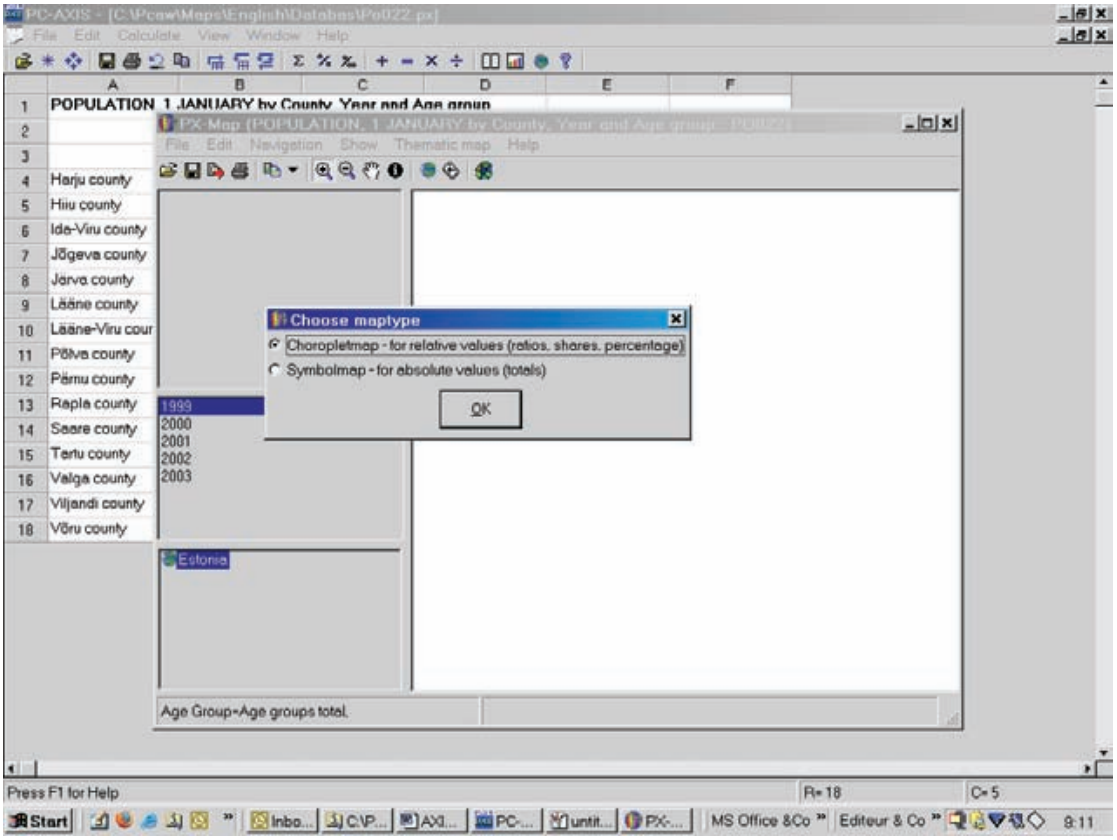


Press the ***OK***-button and your table of selected data is displayed:

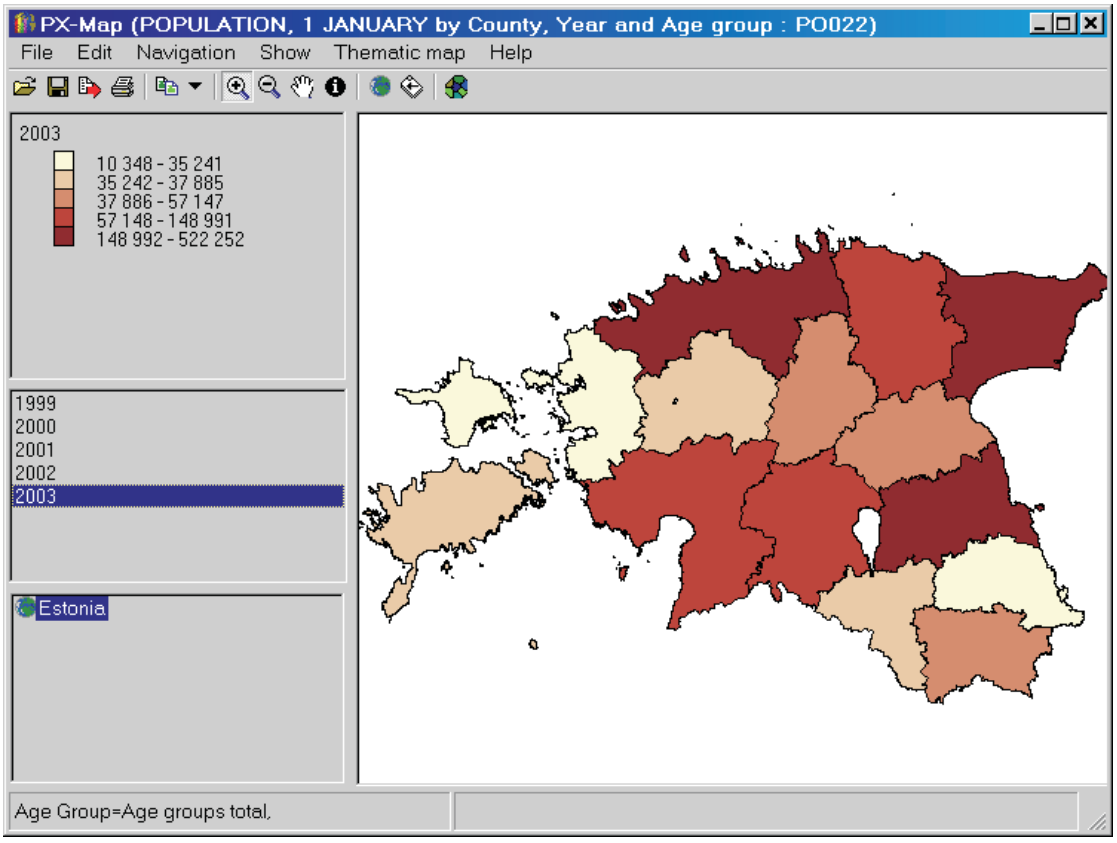


	A	B	C	D	E	F
1	POPULATION, 1 JANUARY by County, Year and Age group					
2		1999	2000	2001	2002	2003
3		Age groups total	Age groups total	Age groups total	Age groups total	Age groups total
4	Harju county	528 109	526 155	524 972	523 588	522 252
5	Hiiu county	10 506	10 458	10 438	10 385	10 348
6	Ida-Viru county	182 437	180 143	178 896	177 471	176 181
7	Jõgeva county	38 756	38 372	38 223	38 060	37 886
8	Järva county	39 142	38 871	38 682	38 514	38 408
9	Lääne county	28 760	28 695	28 548	28 394	28 232
10	Lääne-Viru county	68 505	67 910	67 610	67 364	67 052
11	Põlva county	33 050	32 743	32 527	32 308	32 121
12	Pärnu county	92 024	91 363	90 998	90 507	90 127
13	Rapla county	37 697	37 671	37 505	37 319	37 270
14	Saare county	36 239	36 010	35 877	35 746	35 584
15	Tartu county	148 861	149 744	149 488	149 160	148 992
16	Valga county	36 135	35 861	35 683	35 479	35 242
17	Viljandi county	58 595	58 087	57 798	57 482	57 148
18	Võru county	40 421	39 988	39 714	39 465	39 202

The Map-button is now enabled, and you are ready to make your map.


POPULATION 1 JANUARY by County, Year and Age group
Choose maptype
Choropletmap - for relative values (ratios, shares, percentage)
Symbolmap - for absolute values (totals)
OK
Age Group=Age groups total.

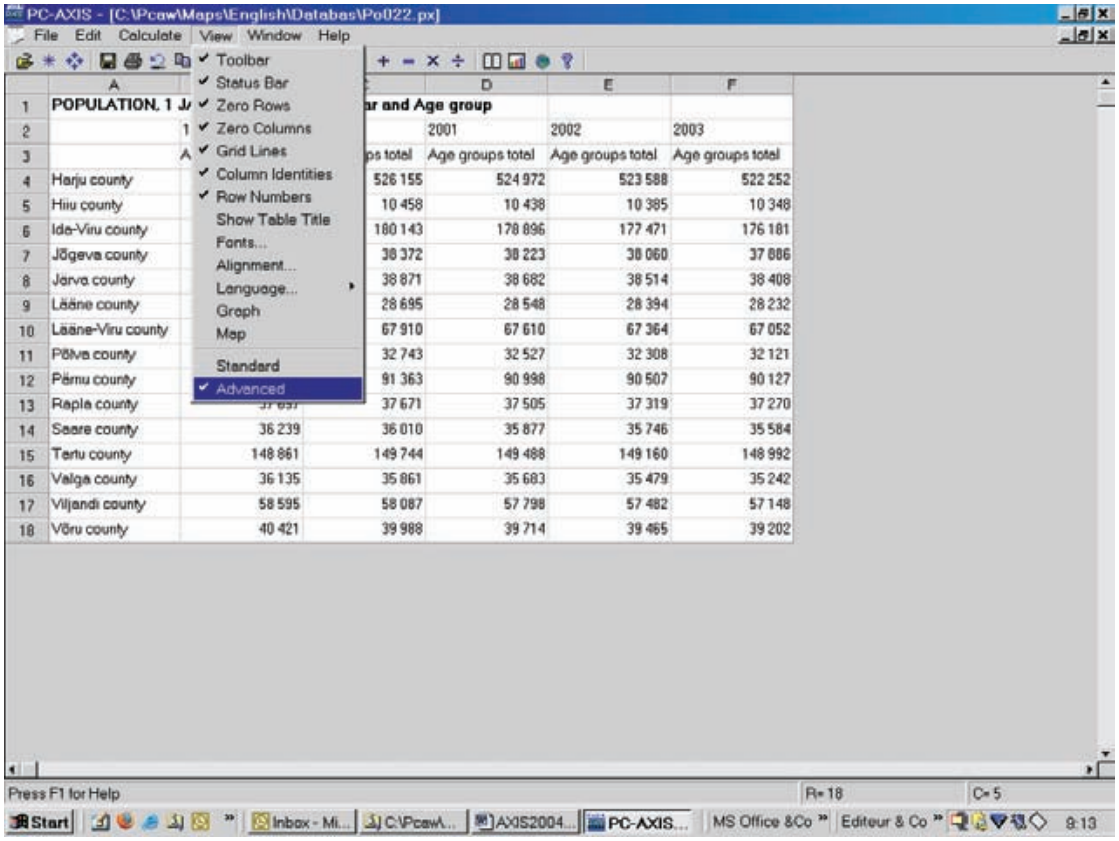
Choose the type of thematic map you want to make. Press the ***OK***-button in the ***Choose maptype*** dialog-box, and PX-MAP produces the choroplet map:



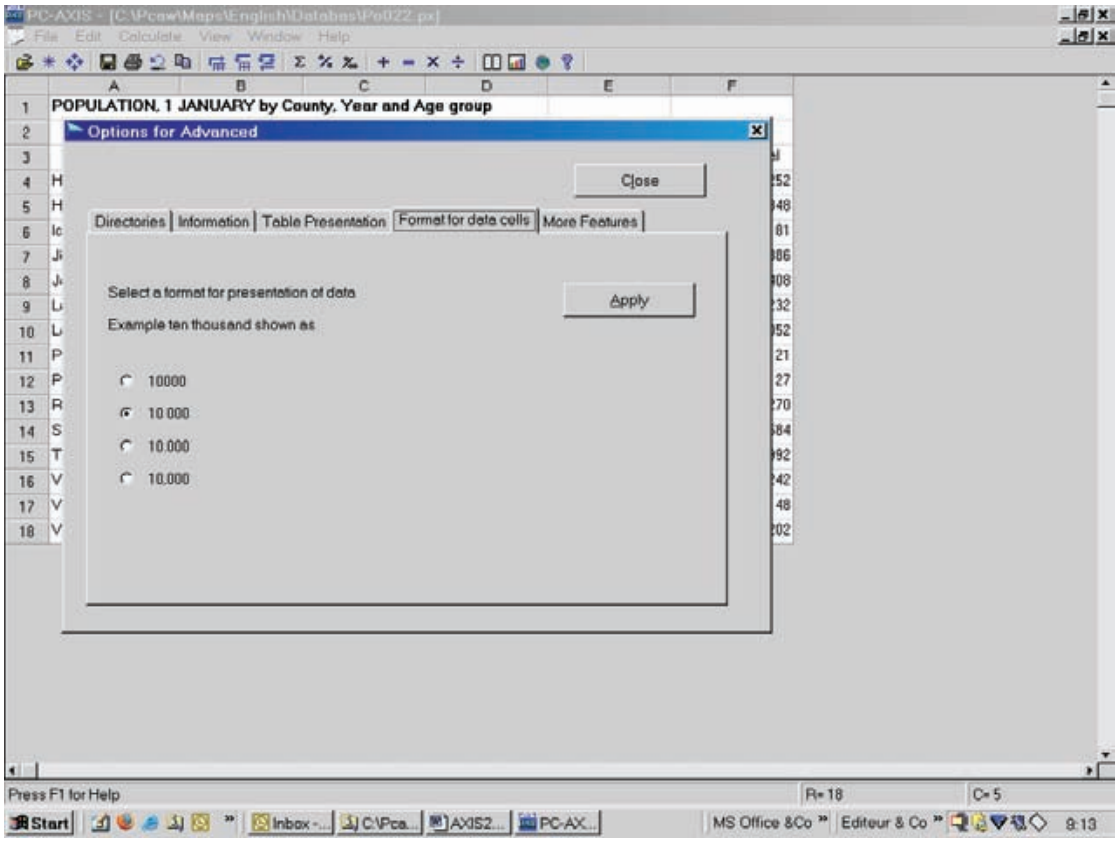
Pointing to the region with the pointing tool in the map picture, you get information about the region-ID, name of the region and the value for this statistical variable for this specific region.

SOME MORE ADVANCED OPTIONS

The presentation of figures in the table cells can optionally hold thousand delimiters. Use the menu ***View-Advanced.***


PC-AXIS - [C:\Pcaw\Maps\English\Databas\Po022.px]
File Edit Calculate View Window Help
Toolbar
Status Bar
Zero Rows
Zero Columns
Grid Lines
Column Identities
Row Numbers
Show Table Title
Fonts...
Alignment...
Language...
Graph
Map
Standard
Advanced
POPULATION, 1 J
ar and Age group
2001
2002
2003
Age groups total
Harju county 526 155 524 972 523 588 522 252
Hiiu county 10 458 10 438 10 385 10 348
Ida-Viru county 180 143 178 896 177 471 176 181
Jõgeva county 38 372 38 223 38 060 37 886
Järva county 38 871 38 682 38 514 38 408
Lääne county 28 695 28 548 28 394 28 232
Lääne-Viru county 67 910 67 610 67 364 67 052
Põlva county 32 743 32 527 32 308 32 121
Pärnu county 91 363 90 998 90 507 90 127
Rapla county 37 671 37 505 37 319 37 270
Saare county 36 239 36 010 35 877 35 746 35 584
Tartu county 148 861 149 744 149 488 149 160 148 992
Valga county 36 135 35 861 35 683 35 479 35 242
Viljandi county 58 595 58 087 57 798 57 482 57 148
Võru county 40 421 39 988 39 714 39 465 39 202
Press F1 for Help
R= 18
C= 5
Start
MS Office &Co
Editeur & Co
9:13

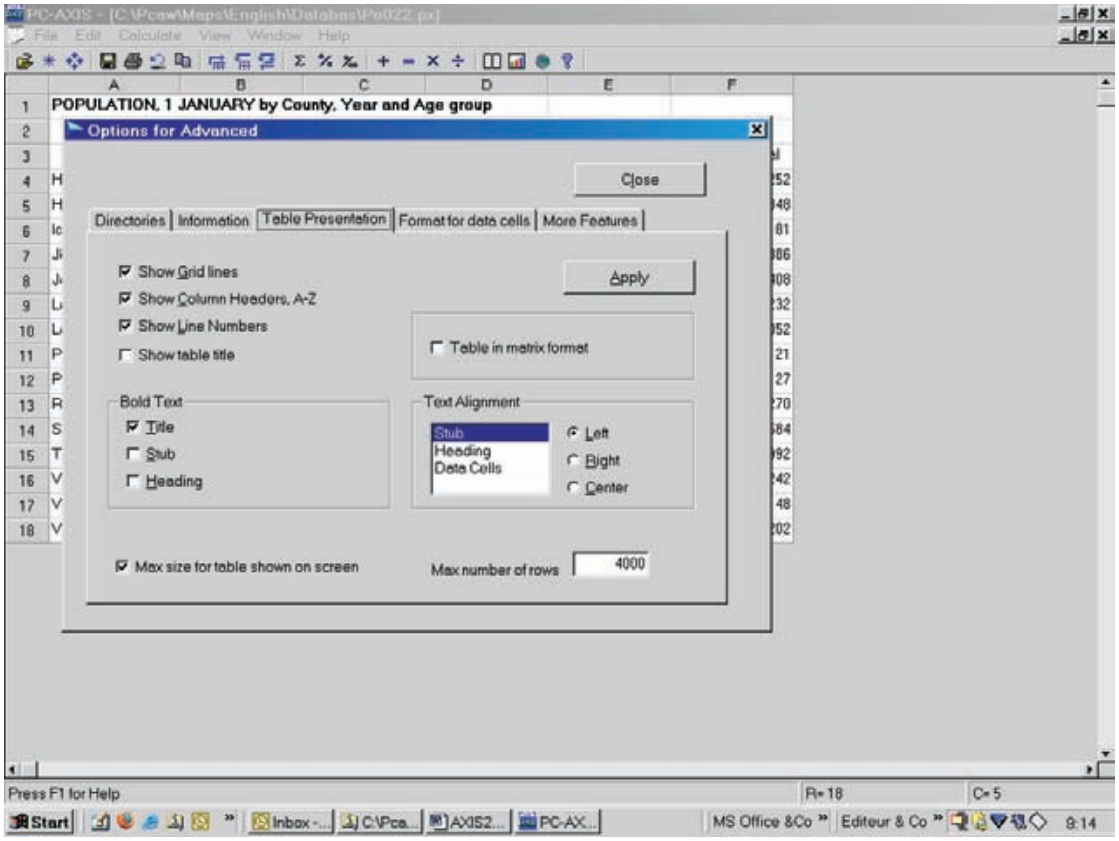
Select the tag ***Format for data cells***.



Then mark the type of thousand delimiter you want to use in the table. The selected option will work from the next table opened in PC-AXIS.
It is possible to change a lot of different parameters.

Table size

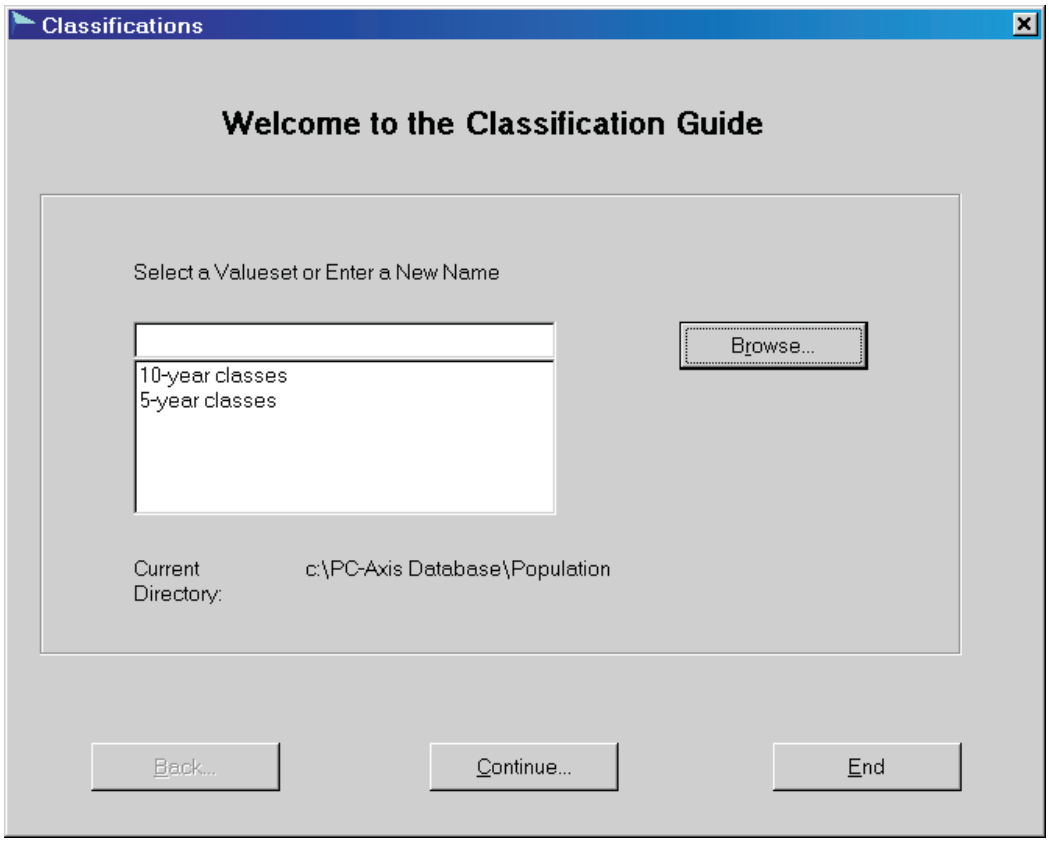
You can set the number of lines you as a maximum want the table to use on the screen. Even if you cannot see the table on the screen you can work with the whole table.
The more table cells you show on the screen the longer it will take to make operations on the table. Furthermore it uses more RAM.
Decide the layout of the table using ***View***. You can delete the gridlines, line numbers etc by clicking on the " *v* ".



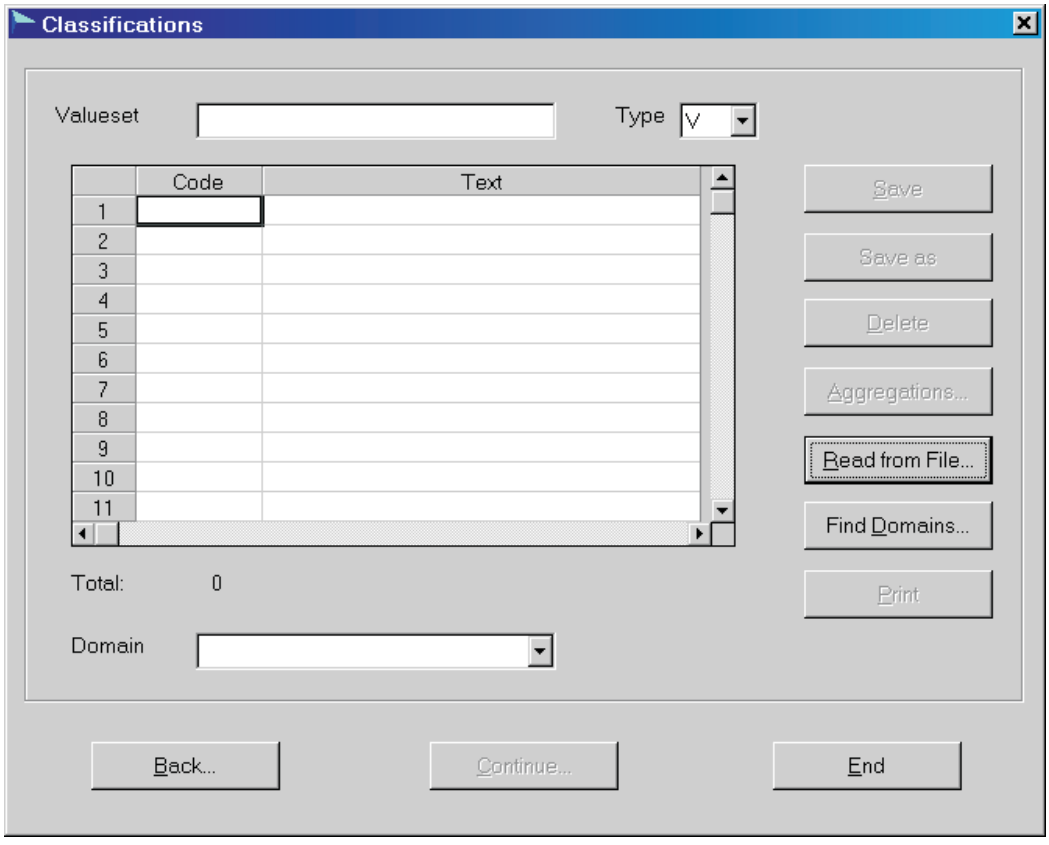
CLASSIFICATIONS

You can define from a value set a classification register that contains the desired summings. Instead of classification register the sum function in PC-AXIS can be used. For the variable *age* several classifications can be established to create several age groups. Also for the variable *region* municipalities can be put together in larger areas forming special divisions of the country.

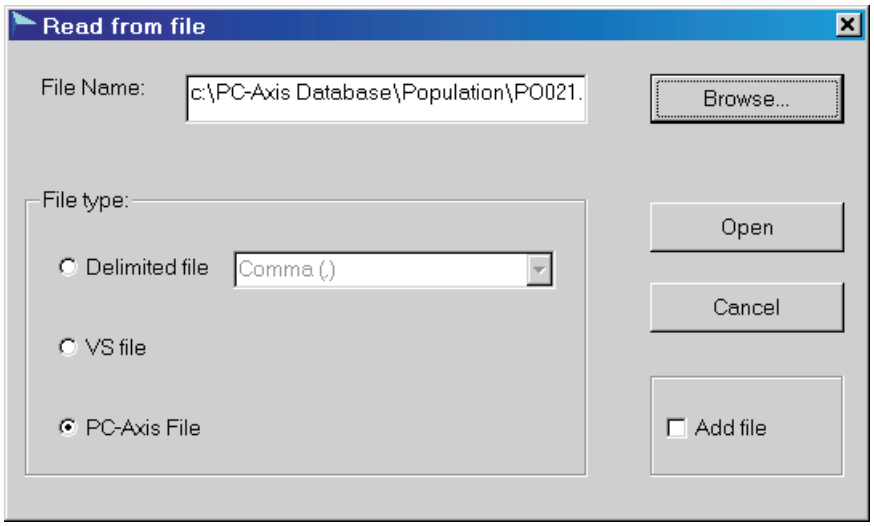
Create a classification
Select ***File, Classification...***



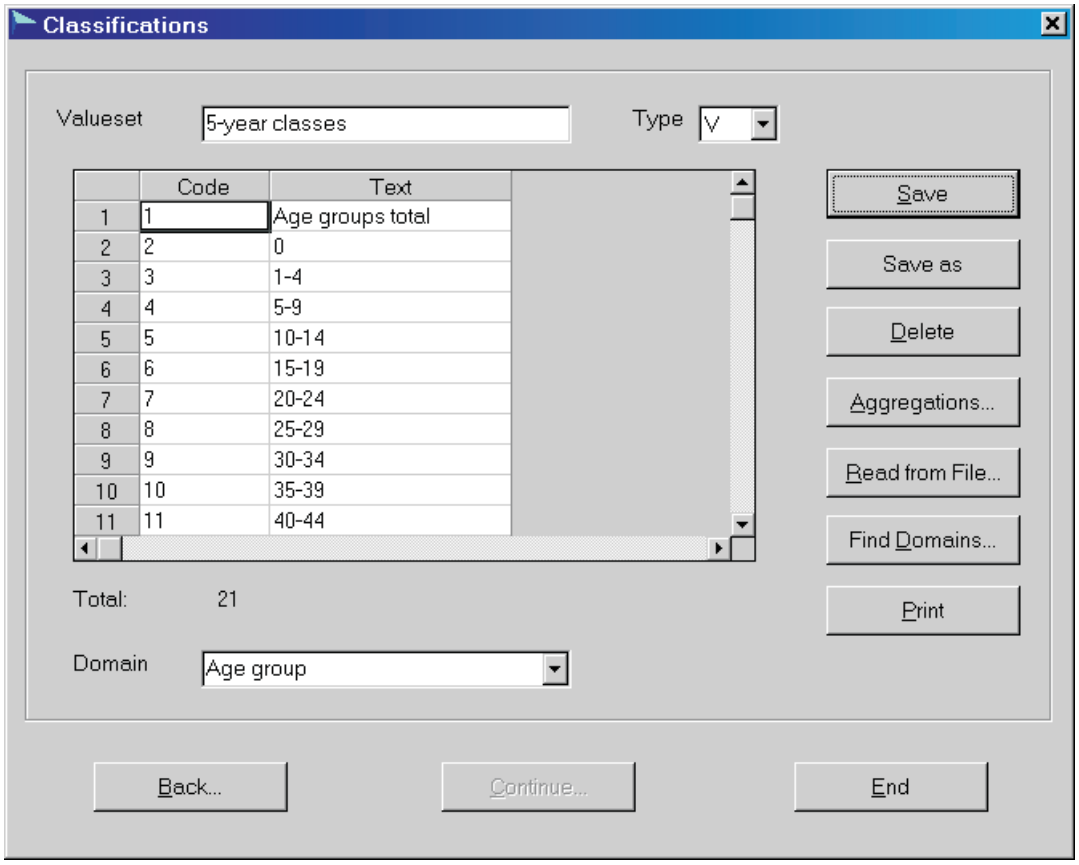
Select among the value sets available in the listbox or use ***Browse*** if you want to change to another classification catalogue. And press ***Continue…***.



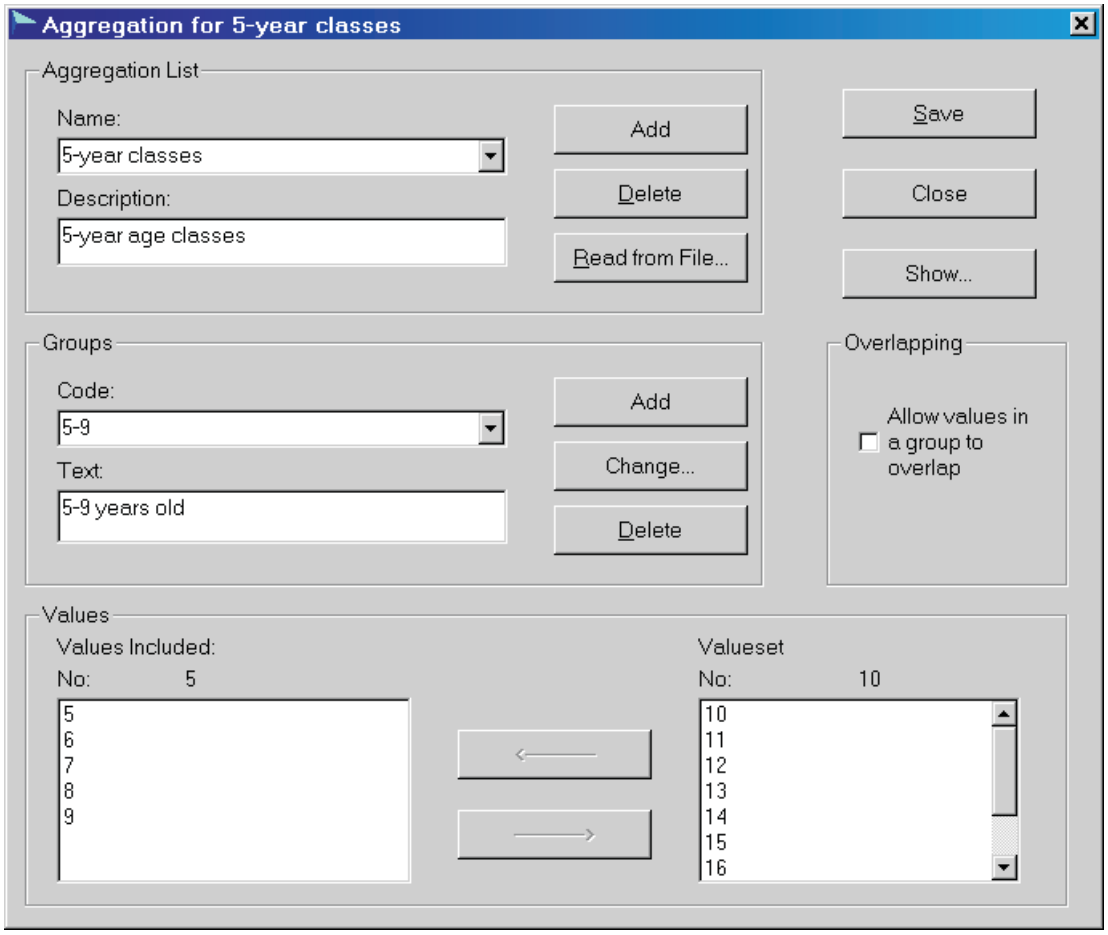
To avoid manual data entry you can use the option ***Read from file...*** and you will find a window with already existing value sets or PC-AXIS table.



Now the page will be filled with values from the selected value set or PC-AXIS table (text and codes), the name of the domain and the type of value set (V=Value set of normal structure, H=Hierarcical value set, N=sub areas).



Press on the button ***Aggregations…***.



In the upper field the name of the aggregation list has to be entered, for example 5-year classes. This name will be used in the table heading when this aggregation list is used. For groups every single group is named (Code and text, for example 0-4 in both fields). Before every new group you have to press the button ***Add***.
For values you have to select the values, which will be included into the group, for example for the first group 0, 1, 2, 3, 4. the source value set you can find in the right. To transfer values use the arrow key button.
To create overlapped groups tick on ***Allow values in a group to overlap***.
Use the ***Show*** button to check the result before saving.

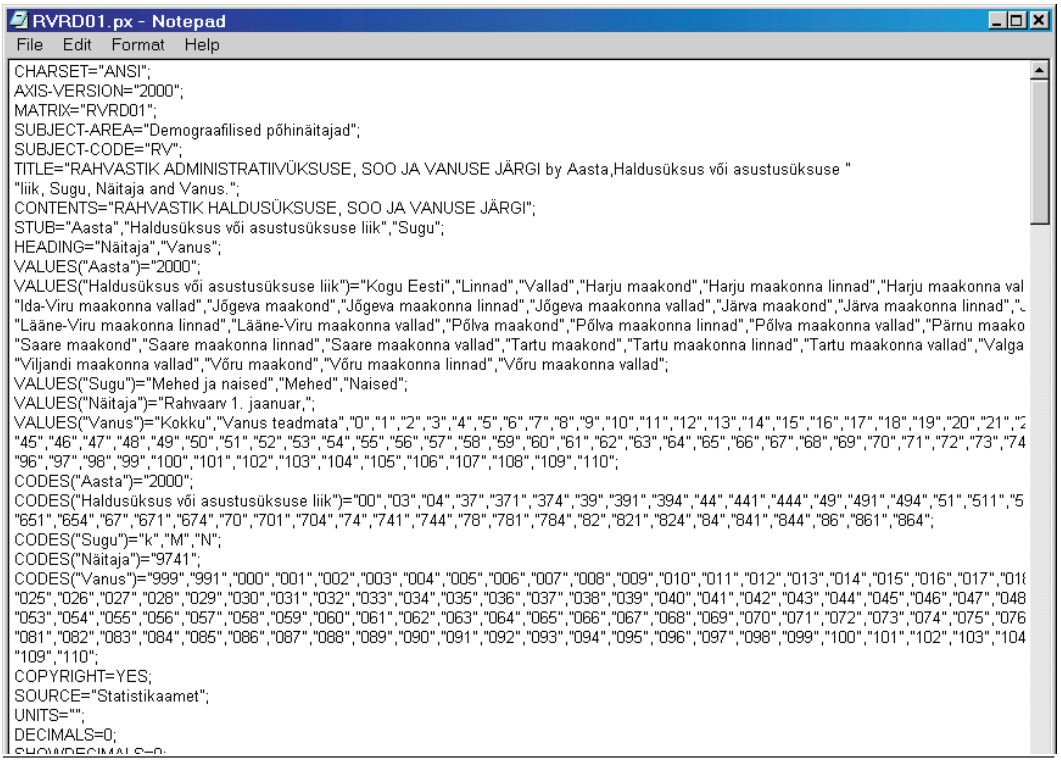
To be able to use the aggregations one shall secure the consistency between the PC-AXIS files and the aggregations lists. The right classification catalogue has to be linked to PC-AXIS.

Domain is a keyword that can occur for any variable. It refers to a class of values. A list with all names of existing domains can be seen from the Classification program if the right current database is linked. The name can also be found with the ***Domain*** keyword in the px-file. This name is to be used when establishing a new value set.

In case you after having created a classification register do not access to it when opening a table the reasons can be following:

- The current classification catalogue does not contain the created classification register. Shift classification catalogue. Do it at the same places as where you shift database. It is also possible to set a default catalogue in ***View, Advanced…***. Select ***Classification Directory*** and set the desired catalogue.
- ***Domain*** is not corresponding between the px-file and the value set. Open the px-file in Notepad and check if the name corresponds to the value set.

Px-file



RVRD01.px - Notepad

File Edit Format Help

```
CHARSET="ANSI";
AXIS-VERSION="2000";
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SUBJECT-AREA="Demograafilised põhinäitajad";
SUBJECT-CODE="RV";
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"liik, Sugu, Näitaja and Vanus.";
CONTENTS="RAHVASTIK HALDUSÜKSUSE, SOO JA VANUSE JÄRGI";
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VALUES("Haldusüksus või asustusüksuse liik")="Kogu Eesti","Linnad","Vallad","Harju maakond","Harju maakonna linnad","Harju maakonna val
"Ida-Viru maakonna vallad","Jõgeva maakond","Jõgeva maakonna linnad","Jõgeva maakonna vallad","Järva maakond","Järva maakonna linnad","
"Lääne-Viru maakonna linnad","Lääne-Viru maakonna vallad","Põlva maakond","Põlva maakonna linnad","Põlva maakonna vallad","Pärnu maako
"Saare maakond","Saare maakonna linnad","Saare maakonna vallad","Tartu maakond","Tartu maakonna linnad","Tartu maakonna vallad","Valga
"Viljandi maakonna vallad","Võru maakond","Võru maakonna linnad","Võru maakonna vallad";
VALUES("Sugu")="Mehed ja naised","Mehed","Naised";
VALUES("Näitaja")="Rahvaarv 1. jaanuar,";
VALUES("Vanus")="Kokku","Vanus teadmata","0","1","2","3","4","5","6","7","8","9","10","11","12","13","14","15","16","17","18","19","20","21","
"45","46","47","48","49","50","51","52","53","54","55","56","57","58","59","60","61","62","63","64","65","66","67","68","69","70","71","72","73","74
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CODES("Näitaja")="9741";
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SOURCE="Statistikaamet";
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